

## Questions for Meeting with Provincial Ministers

**1. Please provide RPA**

- [http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2018/2018\\_050-eng.html](http://www.dfo-mpo.gc.ca/csas-sccs/Publications/SAR-AS/2018/2018_050-eng.html)

**2.**

**3. Are there lots of other steelhead DU's or stocks on the Fraser? Do we have any order of magnitude assessment of how they are doing? And do they run at approximately the same time?**

- There are numerous other systems that produce steelhead in BC, and within the Fraser River. The largest population is on the Chilliwack River – winter timing so later than interior populations of concern, and also involves hatchery production.
- There are various other populations including Pitt River, Stein River (winter timing), Lillooet (spring timing), and more (I don't have a complete inventory at the moment).
- BC has the options that are under discussion for chum management for the 2019 IFMP, which are essentially the "list" and "do not list" scenarios that were discussed in SARA consultations – a roughly 30-day window closure which is "like 2018" (with very limited FSC gillnet for FN), and a 60-day window closure. As the steelhead window closure immediately followed the coho window closure, there is additional protection "built in" to the two options for in-river areas (but coho window closure is within the Fraser River and Steelhead closure extends out well into the marine environment). Their input at the IHPC meeting held last week is summarized here. The Province of BC was well represented on the phone and in the room (Andy Witt-in person, Mike Ramsay, Rob Bison and Larry Nielsen). Key points of discussion included:

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4. I understand BC has prepared a draft Emergency Plan for Steelhead. Have they provided it and can I get a copy?
5. Is strategic enhancement potentially part of the way forward? I understand that we don't have facilities inland that could do this, but there is the Quesnel Research Station (UNBC) and Clearwater (BC Govt).

- As for Thompson and Chilcotin Steelhead I have not seen any analysis of the potential options/risk and benefits of Hatchery intervention. Approximately 15 steelhead stocks are currently enhanced coast wide mostly by DFO and some in partnership with the Freshwater Fisheries Society of BC (from their Abbotsford facility) to provide angling opportunities and limited stock rebuilding. Given the complex life history of Steelhead there has been limited success using hatcheries as a conservation tool. Nevertheless, research continues (primarily in the U.S. A.) and some success has been demonstrated for example on the Hama Hama River with innovative techniques. Presumably BC's Freshwater facilities at Clearwater or Abbotsford could support potential hatchery efforts. However, any steelhead conservation enhancement discussions need to occur with an awareness of the provincial perspective in the BC Framework for Steelhead Management <http://www.env.gov.bc.ca/fw/fish/docs/Provincial-Framework-for-Steelhead-Management-in-BC-April-2016.pdf> that identifies a strong discrimination between wild and hatchery steelhead and explicit repeated objection to hatcheries for conservation. The Thompson and Chilcotin systems are large and so brood stock collection and other conservation enhancement efforts would be challenging. Nevertheless an assessment of the conservation hatchery options seems like an essential piece for decision makers. Maybe an independent expert needs to prepare this.
- Current sockeye, Chinook and Coho focussed conservation and coded wire tag indicator stock programs fully utilize DFO interior Fraser production capacity (Spius and Shuswap Hatcheries)
- SEP Hatchery Operations and Planning and Assessment staff are currently reviewing hatchery capacity at DFO interior Fraser hatcheries with the goal of explaining the current range of production options in the event that new conservation or production priorities are identified (i.e. new PST indicators). Support biologists and Real Property engineers are also assembling a list of past, current and potential new hatcheries or infrastructure that could be built (with cost estimates) to address new conservation or indicator stock needs (sockeye and Chinook focussed). As Rebecca indicated funding for infrastructure and operations is required and the current review is somewhat off-the side of the desk.

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6. Any recent developments on Trapper Lake initiatives?

- (Rebecca) I have met with Tom Etheir at least 4 times on Trapper Lake, and most recently as with the specific part of the organization that does the permitting.

- Sarah has been working with BC on the program roll out. Tyler is taking over Feb 18. He is spending the week in Halifax to learn from the AFF group. Sarah can offer an update on discussions, although I think all is going well.

7. Has BC agreed with the BCSHRIF Program Terms and Conditions? Not sure how much room we will have for adjustment once we sign off for TB.

8. Between CRF, HSP, PSF projects, SEP restoration, etc, do we have a compendium of restoration initiatives we have undertaken (or paid for or contributed to) that have make a contribution of habitat important to steelhead?

- See attached for a summary.
- DFO has dedicated significant effort and funds to habitat restoration and improvement for interior chinook stocks. Many of the target areas overlap with and benefit steelhead, particularly in the Thompson and Nicola systems.
- Across these watersheds, DFO has worked to improve water management regimes and flows/temperatures, DFO has supported projects to reduce the mortality and other impacts of irrigation withdrawals and other agricultural practices, DFO has supported many kilometers of streambank restoration, and fish passage structures and improvements, all to improve conditions for chinook and by extension steelhead and has collaborated with BC on some of this work, particularly in the Nicola.
- The most important areas for improved DFO/BC cooperation include managing water use/withdrawals, managing/reducing the impacts of forestry and agriculture on fish habitat, improved planning and information management, stewardship, education and building capacity in local communities.

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9. Is there one or two obvious restoration initiatives that we could do that could make a substantive difference. Seems to me much of our work has been further down the Fraser system (Nicola Valley, etc)?

Additional Questions

10. It may be rather too big a project to take on (maybe a summer student project?), but given everything going on (Steelhead issues, Chinook issues, focus on the Fraser River Watershed), it might be useful to have a compendium of what we have done and what we have contributed to for restoration along the Fraser system. Over the past 8 or so years, we have had RFCPP,

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SEP, CRF, HSP, ASFAR, PSF and probably other TLA's (three letter acronyms). Would be good to know -- and I expect we will be asked about it.

- We have been working to improve our reporting for both restoration and more broadly SEP. We will have a draft report at the end of fiscal, but it is going to take more effort over the next year to improve. In particular, our restoration reporting across programs definitely needs some work. I am hopeful in the long term a GIS system like the Pacific Salmon Explorer might be a possible tool, but in the interim I have a consultant helping us. To me, this illustrates the need for a strategic planning function for this type of work.

11. Seems to me that the impact of two years of significant forest fires is something we are going to have to do more research on. I know we have had some difficult fire seasons in previous years, but these past two years have been uniquely challenging and would be good to have an assessment.

- Forest fires, and possibly more importantly the spring floods that follow the following year have been devastating in some watersheds. However, there is an argument to make that forestry activity is a much more significant impact across the landscape. This is a prime area for cooperation with the Province of BC and for experimentation.

Not included:

1. Ocean vs freshwater survival – our colleagues in science are best placed to provide the detail and evidence, of which there is a fair amount from the recent Salish Sea Survival Initiative. In short, both are important – Ocean survival has dropped from 3-5% to 1% or lower. This seems like a small shift, but the impacts are massive. In freshwater, there is more potential to increase survival, and the impacts can be large. You can play with the percentages and some fake numbers easily to see the differences:

# of fish	Freshwater Survival	# of fish	Ocean survival	# of fish
100,000	50%	50,000	2%	1000
100,000	80%	80,000	1%	800

This is of course a massive oversimplification and does not account for all kinds of factors, but it illustrates the importance of accounting for all phases in life history when planning for survival and recovery.

2. On the restoration front, our efforts have been focused on chinook and coho, but many of those works would also benefit steelhead.

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## Funding to Support Habitat Improvement for Steelhead Trout

### Funds:

- Coastal Restoration Fund (CRF)
- Habitat Stewardship Fund (HSP)
- Fish Habitat Restoration Initiative (FHRI)
- Aboriginal Fund for Species at Risk (AFSAR)
- Pacific Salmon Foundation (PSF)

### Coastal Restoration Fund

Collaborator	Title	Objective	Years	Amount	Partners/Involvement (Indigenous and others)	Area of Impact	Targeted Species at risk
British Columbia Conservation Foundation	Orca Sustainance: Thompson River Chinook Project 2017-2020	This project aims to complete habitat restoration projects, primarily focussed on restoring Chinook habitat at 9 high priority locations on the South Thompson River (and to a lesser extent the North Thompson Drainages) to improve spawning and rearing success and promote higher Chinook out-migration. These Chinook habitat restoration activities will contribute to the mitigation of stressors affecting RKW populations related to prey availability. It is estimated that this project will result in approximately 18,035 m2 of habitat restoration.	3 years	\$1,733,746	<ul style="list-style-type: none"> <li>• First Nations: Secwepemc Fisheries Commission</li> <li>• Simpcw (North Thompson Indian Band)</li> <li>• Lower Nicola Indian Band</li> <li>• Douglas Lake Ranch</li> <li>• Wallis Environmental Aquatics</li> <li>• Land Owner – Jenny Garthwaite</li> <li>• Shawnessy Enterprises Ltd</li> <li>• Land Owner – Rey Creek Ranch</li> </ul>	<ul style="list-style-type: none"> <li>• Salmon River Delta</li> <li>• Upper Nicola River</li> <li>• Louis Creek</li> <li>• SBS Creek</li> <li>• Louis Creek</li> <li>• OCH</li> <li>• Quilchena Creek</li> <li>• Guichon Creek</li> <li>• Quinville Creek</li> <li>• Lower Nicola River</li> <li>• Little Shuswap</li> </ul>	<ul style="list-style-type: none"> <li>• Chinook salmon, Coho, Steelhead, Rainbow and Bull trout, and other species</li> </ul>
SeaChange Marine Conservation Society	Salish Sea Nearshore Habitat Recovery Project	The goal of the Salish Sea Nearshore Habitat Recovery Project is to recover ecosystem health and increase resiliency of nearshore intertidal and subtidal habitats for all species of salmon and the critical forage fish upon which they rely. The focus will be native eelgrass and nearshore riparian habitats in estuaries and bays	5 Years	\$1,309,333	<ul style="list-style-type: none"> <li>• Gulf Islands (community members and Regional Technical committee members)</li> <li>• Burrard Inlet (community members and Regional</li> </ul>	<ul style="list-style-type: none"> <li>• Salish Sea, B.C.</li> <li>• Gulf Islands</li> <li>• Burrard Inlet</li> <li>• Sechelt Inlet</li> <li>• Howe Sound</li> </ul>	<ul style="list-style-type: none"> <li>• Chinook, coho, chum and sockeye salmon</li> </ul>

Collaborator	Title	Objective	Years	Amount	Partners/Involvement (Indigenous and others)	Area of impact	Targeted Species at risk
		where salmon are most affected by anthropogenic activities, such as nearshore development, non-point pollution and climate change. Species of special concern are Chinook, coho, and steelhead, which have experienced a tenfold decline in survival during the marine phase of their lifecycle in nearshore marine habitats.			Technical committee members • Sechelt (community members and Regional Technical committee members) • Howe Sound (community members and Regional Technical committee members)		
Shuswap Nation Tribal Council	Secwepemc Fisheries Commission – Thompson Basin Fish Habitat Restoration Through Collaboration and Shared Vision	A three part project targeting Thompson River Chinook through Sensitive Habitat Information Mapping (SHIM) on the Bonaparte River, flow monitoring on the Bonaparte, Deadman, Louis, Bessette and Salmon rivers, and implementation of restoration projects on the Bonaparte.	3 years	\$443,691	Builds on previous interior projects by targeting water quality and quantity in 5 systems in Thompson watershed with targeted restoration in Bonaparte. Bonaparte restoration priority directly supports Thompson chinook and steelhead. Project supports capacity building in Secwepemc Fisheries Commission.	Thompson Watershed - Bonaparte R, Deadman R, Louis Cr, Salmon R, Bessette Cr	Spawning and rearing Thompson/Shuswap Chinook, coho and Thompson steelhead
Fraser Basin Council Society	Collaborative salmon and habitat restoration and research in the Nicola watershed	Research, assessment and restoration including surface and groundwater interaction studies and Sensitive Habitat Inventory Mapping (SHIM), to guide strategic restoration planning and implementation in the Nicola watershed.	3 years	\$390,000	Large partnership project led by FBC with the Nicola Basin Collaborative Research & Technical Committee (DFO, MoE, FLNRO, UBC, SFU, UNBC, TRU) and local Indigenous Groups (Nooaitch and Lower Nicola Indian Bands and Nicola Tribal Association) that builds off the existing Nicola Watershed Management Tool and advances restoration	Nicola River and tributaries (Coldwater River, Spius Creek, Guichon Creek)	Thompson-Nicola chinook, coho and steelhead Spawning and rearing habitat

Collaborator	Title	Objective	Years	Amount	Partners/Involvement (Indigenous and others)	Area of impact	Targeted Species at risk
					opportunities to support Thompson-Nicola chinook, coho and steelhead stocks. Potential collaboration with Shuswap Nation Tribal Council.		

#### Habitat Stewardship Program

Project	Objective	Total (HSP + Matching)	HSP
2017HSP8016 Groundwater Mapping In The Nicola Watershed	This single year Habitat Stewardship Program (HSP) Prevention Stream project will provide a means of facilitating more systematic management of the Nicola watershed through delineation and mapping of the groundwater resource. Groundwater is often overlooked in context of British Columbia's abundant surface water resource. It is of vital economic importance to agricultural and industrial users, and groundwater baseflow provides an unequaled high volume and high quality water source for fisheries and ecosystems. With increasing demand and reliance on ground water from a growing population comes the need to increase efforts to protect and manage the resource. However, the information currently available to managers, planners and stakeholders is primarily in raw data form (i.e. well records, water chemistry), or isolated studies in specific areas.		\$25,000
2017HSP8070 Nicola Water Management Tool - finalized development, user training, and implementation	This is a "dashboard" water management tool, used for operating/managing a dam and upstream reservoirs, that integrates sometimes conflicting priorities from various stakeholders – agriculture (irrigation, domestic, livestock), fisheries, First Nations, domestic (urban and rural), cottage owners, and transportation. This project will have significant social, economic, and cultural benefits from the fisheries perspective alone. Important fish species include chinook, coho, pink, steelhead, rainbow trout, brook trout, mountain whitefish, burbot, kokanee, and bull trout. This is a computer tool that would be developed after much necessary data mining (e.g. from various hydrology reports) and connection to ongoing data sources (e.g. dynamic snowpack data and stream flow instrumentation). The project will be facilitated by FBC and guided by the Nicola Technical Committee that includes		\$47,500
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Project	Objective	Total (HSP + Matching)	HSP
	members from the Nicola Tribal Association (NTA), DFO, Nicola Valley Institute of Technology, and MFLNRO.		
2016HSP7592 Mapping of critical summer thermal refuge habitats for chinook salmon, coho salmon, steelhead and bull trout in the Nicola River Watershed	The primary focus of this project is identifying and mapping the locations of areas of cold water upwellings that provide thermal refuge for Coho salmon, Chinook salmon, rainbow trout, bull trout and steelhead during periods when the temperature is generally inhospitable to fish. This project will provide a detailed map that will identify threats and provide recommendations for mitigation of those threats. The Nicola watershed is the driest watershed in British Columbia and it was hit hardest by the 2015 drought. The lack of precipitation and high temperatures in the Nicola watershed combined with water use, loss of riparian habitat, and climate change has resulted in low flows and water temperatures that exceeded critical temperature thresholds for some fish species. An understanding of where thermal refuges exist in the watershed will help support land use decisions and direct research objectives.	\$29,874	
2016HSP7658 Development of a Collaborative Plan for the Nicola Watershed to Provide Direction for Projects, Research, and Public Outreach	This Habitat Stewardship Program Prevention Stream Project will help to address many issues affecting Coho salmon, Chinook salmon, steelhead trout, and rainbow trout. The Nicola watershed is one of the driest watersheds in BC and as such is negatively affected by drought conditions. A naturally dry system coupled with low precipitation results in low flows and water temperatures too high to successfully support salmonids. In addition, there is a lack of riparian habitat throughout the watershed and relatively heavy agriculture use and development is present. The Nicola Planning Process has been underway since 2012 and is guided by a broadly represented, collaborative planning committee. The planning process resulted in local research, the Nicola Lake Action Plan and the Nicola Eurasian Watermillfoil Management Plan. Recognizing the complex issues affecting water, fish, and people in the Nicola, the Committee would like to move forward with a watershed wide project for the Nicola watershed to address those issues and to provide education opportunities for the public. Several projects are underway in the watershed lead by first nations and other government agencies, and private land owners. The collaboration of all agencies along with the general public as part of a watershed wide planning process will help to identify, prioritize, and address issues including lack of riparian vegetation and will help to guide on the ground work for land managers. This planning process will help to coordinate work, avoid duplication of efforts and apply limited resources to a watershed that is greatly in need of improvement.	\$29,694	
2017HSP7997 Groundwater Budget Development - Nicola River And Coldwater River	This two-year Habitat Stewardship Program (HSP) Prevention Stream project will develop an empirical groundwater budget for the Nicola and Coldwater River aquifers. The project focuses on the Nicola River and Coldwater River sub-basin of the Nicola Watershed south of Merritt, BC, specifically the	\$50,000	

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Project	Objective	Total (HSP + Matching)	HSP
	<p>Nicola and Coldwater Rivers (Nicola R between the Nicola Dam and confluence with Spius Creek and Coldwater River from Kingsvale/Gillis Road Bridge to the Nicola River confluence). The area is host to target species including Bull Trout (Sensitive), Chinook Salmon (Secure), Coho Salmon (Secure), Rainbow Trout (Secure) which are all sensitive to decreases in stream flows from potential overuse of groundwater resources.</p> <p>Aquifers in the area are known to be hydraulically connected to the overlying river systems, which support high value fisheries. There is a high reliance on groundwater in the Coldwater River valleys for irrigation and municipal water works. There is considerable interest in the area regarding these interactions, particularly how stream flows contribute to the aquifers in the area and how pumping from wells may impact the overall water budget and the flow in the rivers during critical periods. Recent research and other water budget projects in the area have prompted a need for a better understanding of these interactions to assist with water use planning to preserve needed flow volumes in the rivers during critical periods.</p>		
2014HSP7741 Promotion of Agricultural Stewardship in the BC Interior to Protect Priority Salmonid Stocks (Completed in 2015)	<p>The project purpose is to promote stewardship and protect the target species on agricultural lands by doing habitat protection &amp; restoration demonstration projects. Projects sites have been identified previously and conceptual ideas around restoration recovery have been developed but need final development and implementation. The target species of concern are salmonids contributing to economic and social values in the BC Interior on agricultural lands with a focus on protecting and enhancing their limited and important rearing habitat. Threats - historical agricultural land clearing and stream training practices combined with current intensive water use have greatly diminished available small stream summer and over wintering rearing habitats.</p>		\$50,000
2014HSP7481 Implementing a Fish Water Management Tool at the Nicola Lake dam (Completed in 2015)	<p>This HSP-Prevention project is attempting to emulate the success of the Fish Water Management Tool that was implemented in the Okanagan by DFO, BC, First Nations and others. This is a "dashboard" water management tool, used for operating/managing a dam and upstream reservoirs, that integrates sometimes conflicting priorities from various stakeholders – agriculture (irrigation, domestic, livestock), fisheries, First Nations, domestic (urban and rural), cottage owners, and transportation. This project would have significant social, economic, and cultural benefits from the fisheries perspective alone. Important fish species include chinook, coho, pink, steelhead, rainbow trout, brook trout, mountain whitefish, burbot, kokanee, and bull trout. This is a computer tool that would be developed after much necessary data mining (e.g. from various hydrology reports) and connection to ongoing data sources (e.g. dynamic snowpack data and stream flow instrumentation). The work would be facilitated by FBC</p>		\$40,000

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Project	Objective	Total (HSP + Matching)	HSP
2014HSP7487 Voluntary stewardship practices on private agricultural lands – planning, inventory, and outreach project (completed in 2015)	and guided by a technical steering committee that includes members from the Nicola Tribal Association (NTA), DFO, and the BC Ministry of Forests, Lands, and Natural Resource Operations. This project addresses voluntary stewardship actions on private lands that play an important role in safeguarding aquatic and riparian areas near agricultural lands. Past feedback to SCBC indicates that for agricultural producers to implement stewardship practices (SPs), the costs and benefits of doing so must make business sense, involve clear actions, and address multiple species. This project aims to demonstrate SPs while meeting business objectives and to build collaborative relationships. These objectives will be achieved by 1) planning of a stewardship program for the restoration of a high visibility location next to a high value wildlife area – a “win/win” collaboration between landowners; BCIT, the District of Maple Ridge, and SCBC. 2) Assessing the presence of the species through surveying (biophysical inventory) including invasive species; the creation of inventory for habitat and species data; and collection of Traditional Ecological Knowledge (TEK); 3) the development and printing of brochures about the restoration project to be made available at the District of Maple Ridge and the landowners shop “CheeseCrafters” for consumers that details the planned restoration of the site including (why, how, partners, etc.) and planning for display signage at the site, including “before”, “during restoration”, and “after” documentation to demonstrate project results.		\$10,175
2016HSP7514 Sensitive Habitat Inventory and Mapping (SHIM), Aquatic Habitat Index, and Restoration Analysis of the Lower Nicola River (completed in 2016)	This single year HSP prevention stream project will address loss of habitat for several fish species and provide baseline data to help prioritize future restoration and mitigation work in the Nicola watershed by developing a sensitive habitat inventory map (SHIM) and determining the aquatic habitat index (AHI) based on the inventory and mapping information. The location of the project is the Lower Nicola River from Merritt to Spences Bridge and the target species include Chinook salmon, Coho salmon, Steelhead trout, and rainbow trout. Habitat types include freshwater systems and riparian areas (threats will be documented including human impacts to foreshore and riparian areas and impacts on water quantity), flows, and temperature. Project activities include detailed analysis and inventory on the river of the status of the foreshore, mapping of that data, and developing the aquatic habitat index. The FIM and AHI results will be posted on the Community Mapping Network website ( <a href="http://www.cmnbc.ca">www.cmnbc.ca</a> ), widely distributed to stewardship groups, all four orders of government (local, First Nations, provincial and federal), and posted on the Fraser Basin Council website. Activities are to be carried out from April 2016 to March 2017. Anticipated project benefits and outcomes are a very detailed current status of fisheries habitat that can then be used for developing foreshore/shoreline guidelines for restoration, mitigation, future development and land use planning by all orders of government.		\$42,000
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## Fish Habitat Restoration Initiative

<p>The new project involves constructing a standard riprap revetment along the right bank meander of the Carnegie site in the Nicola River, where extreme spring freshets were observed in 2017 and 2018, which is threatening the integrity and function of side channel habitat previously constructed by NTA in 2015. The riprap revetment will reduce bank erosion along the toe and side slope of the streambank, and result in protecting the integrity and function of the side channel and associated intake located immediately downstream. If left untreated, higher discharges will continue to erode the right bank of the river, potentially impacting the intake structure and side channel habitat, and contribute significant sediment loads to downstream habitats for years to come. A riprap key-in structure will also be constructed at the upstream end of the site to prevent potential out-flanking of the revetment by the river.</p>	<p>The rehabilitation of an existing 265 metre long, semi-natural fish-rearing channel adjacent to the Coldwater River will be undertaken. The upper portion of the existing channel has in-filled with sediments, and two beaver dams lower in the channel are contributing to additional channel sedimentation and have restricted fish access. The channel will be re-profiled to be narrower, to increase water depths and velocities under base flow conditions. The inlet will be constructed with a 0.4 metre diameter culvert to restrict volume of discharge entering the rearing channel and to maintain stable flows. Riprap of suitable size will anchor the culvert and be added to the side slopes at the channel inlet to ensure stability and limit erosion. A 50:50 mixture of pit-run gravel and quarry tailings will be placed on the channel bed, in seven 20 metre long sections between the riffles and pools, creating hydraulically diverse run habitat for steelhead fry and parr. Four riffles will be constructed and spaced between 50 and 61 metres apart, within a ~200 metre section of the channel. The riffle will be constructed to facilitate adult and juvenile fish passage, and to improve rearing and spawning habitats for steelhead. One large woody debris (LWD) structure will be constructed in each of the nine pools that will also be constructed in the rearing channel. The LWD structures will increase hydraulic diversity and promote scour pool development. The LWD anchored in pools will also improve summer rearing and overwintering habitats. Native riparian vegetation will be planted on the streambank adjacent to the instream treatments in the fall months (October – November). The rehabilitation of riparian area vegetation throughout the project site will add important habitat values.</p>
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## Aboriginal Fund for Species at Risk

AFSAR has not had any projects that target Steelhead directly. There have been two projects valued at a total of [REDACTED] that have benefitted steelhead trout by improving habitat and mitigating threats related to hydroelectric development in British Columbia. That work occurred in the Kispiox River (Skeen River watershed) and the Lower Bridge River (Fraser River watershed) during the 2018-19 fiscal year, and involved the Gitskan Watershed Authorities (project #3202 below) and the Xwisten (Bridge River Indian Band; project #3142 below). Other projects which may have had some benefit to the habitats of interior of BC salmonid species are identified in the table below. Projects occurring in the Columbia River watershed or on Vancouver Island have not been included at this time. Other projects have been proposed over the years, but were not ultimately funded.

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Project - Title	Recipient	Objective	Total (AFSAR + Matching)	AFSAR
2008AFSAR1050 - McKinley Creek Juvenile Coho Habitat Utilization and Outmigration project	Northern Shuswap Tribal Council	The goal of the 2008 McKinley Creek Juvenile Coho Habitat Utilization and Outmigration project is to address knowledge gaps identified by the Interior Fraser Coho recovery team and enable the Northern Secwepemc to play a instrumental role in the recovery of IFC. To accomplish this the NSTC Fisheries Department will operate a Rotary Screw Trap from April to June 2008, collecting data that will determine, but not be limited to, juvenile out-migration behaviour patterns and estimates of population. As well, the NSTC Fisheries Department will study the McKinley Creek Watershed from August 2008 to February 2009 - identifying distribution and preferred areas of habitat utilization through the late summer, winter and early spring. Additional data collected will be abundance data and physiological data, such as growth of the juveniles through the season. Education and restoration of White Sturgeon habitat in Shefford Slough surrounding the Shxwhá:y Village. Project objectives would include increasing community awareness of White Sturgeon and their habitat, training band members to participate in the project, habitat restoration in areas surrounding Shefford Slough and development of prescriptions for future improvement in the quality of Shefford Slough.		\$55,000
2008AFSAR1164 - Assessment and Increased Community Awareness of White Sturgeon and Threatened Salmonid Species in Shefford Slough Surrounding the Shxwhá:y Village	Shxwhá:y Village	Education and restoration of White Sturgeon habitat in Shefford Slough surrounding the Shxwhá:y Village. Project objectives would include increasing community awareness of White Sturgeon and their habitat, training band members to participate in the project, habitat restoration in areas surrounding Shefford Slough and development of prescriptions for future improvement in the quality of Shefford Slough.		\$15,000
2009AFSAR1543 - A Discussion Forum of ATK and Its Linkage to Upper Fraser White Sturgeon and Interior Fraser Coho: Protocols, Methods and Inventory of Existing Databases and Information	Upper Fraser Fisheries Conservation Alliance	The Upper Fraser Conservation Alliance will lead a project with Upper Fraser First Nations, Fisheries and Oceans Canada and experts in Aboriginal Technical Knowledge (ATK) to host two discussion Forums focused on the establishment of protocols for the inclusion of ATK related to two threatened aquatic species in the Upper Fraser: Nechako White Sturgeon and Interior Fraser Coho. The results and experience from the first Forum will be applied by Community Fisheries Representatives at UFFCA First Nations communities. The results of the community work will be shared at a second discussion forum for the benefit of all participants in the first workshop, according to the established ATK protocols.		\$39,000
2009AFSAR1597 - Development and Use of a Framework ATK Protocol for Upper Fraser White Sturgeon and Interior Fraser Coho in the Upper Fraser	Upper Fraser Fisheries Conservation Alliance	The Upper Fraser Conservation Alliance will lead a project with Upper Fraser First Nations Community Fisheries Representatives focused on the refinement and use of an ATK protocol framework for the gathering and sharing of ATK related to two threatened aquatic species in the Upper Fraser: Nechako White Sturgeon and Interior Fraser Coho. The results and experience from the project will be reported at a Discussion forum for the benefit of all participants in the project, as well as DFO personnel.		\$48,819
2017AFSAR2966 - Gates Creek Level 2 Fish Habitat Assessment	St'at'imc Eco-Resources Ltd.	This single year project, being proposed for the Aboriginal Fund for Species at Risk Prevention Stream funding, will identify restoration opportunities for fish habitat in Gates Creek. Gates Creek is a tributary of the Fraser River watershed, a priority area in British Columbia. Habitat prescriptions		\$27,104

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s.21(1)(b)

Project - Title	Recipient	Objective	Total (AFSAR + Matching)	AFSAR
		<p>generated from the Level 2 Fish Habitat Survey will be focused on increasing spawning and rearing habitat for the Gates Creek population of Interior Fraser Coho, Bull Trout and Rainbow Trout. Restoration options will be developed for Gates Creek, Anderson Lake Shore as well as tributaries of Gates Creek. The General Status of Species in Canada ranks Coho Salmon as "secure", but COSEWIC lists Interior Fraser Population as "endangered", Bull Trout are listed as "sensitive", Rainbow Trout and Sockeye Salmon are listed as "secure".</p> <p>Restoration opportunities will be identified from the field survey. From the data collected in the field survey, schematic drawings of habitat structures will be prepared and incorporated into a GIS map. Habitat prescriptions will be focused on land held by the N'Quatqua and BC Hydro as well as Crown land; however, opportunities will also be identified on private land that will provide opportunities for public involvement in future restoration. The habitat restoration prescriptions are the final data piece required by the N'Quatqua to create a restoration plan for Gates Creek.</p> <p>The Gates Creek level 2 Fish Habitat Survey, will deliver on three of the four expected results of the AFSAR prevention stream. This project will strengthen capacity in Indigenous communities to participate in preventive action to conserve fish populations and their habitat by providing training and employment for a N'Quatqua fisheries technician. The restoration technician and professional biologist will mentor the N'Quatqua technician in restoration planning and field surveys. Threats to fish habitat in Gates Creek caused by human activities will be stopped, removed or mitigated by the restoration prescriptions generated in this survey. Spawning and rearing habitat of Coho Salmon, Bull Trout, Rainbow Trout and Sockeye Salmon will also be improved by the restoration prescriptions generated in this project.</p>		
2017AFSAR2976 – Williams Lake Indian Band Borland Creek Restoration	Williams Lake Indian Band	<p>This is a single year project proposed for the Aboriginal Fund for Species at Risk prevention stream funding. It will address the enhancement and restoration of Sockeye salmon habitat on Borland Creek. Borland Creek runs through the Williams Lake Indian Band IR#1 (main community) in the interior of British Columbia. Temperature/climate change, pollution, and habitat destruction are evident throughout the Borland Creek and San Jose River watershed. The central issue is illegal, outdated and badly managed water withdrawals throughout the watershed that results in critically low flows, rising temperatures and in-stream barriers to fish migration in the lower reach within the T'exelc community. This reduces the resilience of in-stream populations of all coldwater fish, potentially leading to the extirpation of the local salmonids. Sockeye salmon is only one notable</p>		\$6,640

s.20(1)(b)  
s.21(1)(b)

Project - Title	Recipient	Objective	Total (AFSAR + Matching)	AFSAR
		<p>species which used to migrate upstream through the community and beyond: they are no longer present in the system except on years of very high abundance.</p> <p>In these lower reaches, there are very few deep, cool holding pools for cold water fish. This project would create one by dismantling a "home-made" dam adjacent to a community sweat lodge and replacing it with an engineered, stable, hydraulic pool using careful placement of large rock and logs. This would provide a holding area of cold water refuge for salmonids, and a river feature that makes the site attractive and safe for community members as well.</p> <p>DFO would develop the project by preparing written designs for the site, and as the proponent, submitting a Section 11 Notification (Water Act) for changes to a stream. The WLIB would collaborate with DFO to work through planning details and establish the working team that would reflect in-kind contributions, at no charge to the project.</p> <p>These activities fulfill three of the activity categories:</p> <ol style="list-style-type: none"> <li>1) protection/rescue and prevention of harm to species at risk - allows for better migration/movement upstream in Borland Creek</li> <li>2) restoration, enhancement, &amp;/or management of species at risk habitat - removal of "home-made" dam &amp; replacing with engineered, stable, hydraulic pool</li> <li>3) training of individuals/community members in stewardship practices &amp; field activities related to species at risk - [REDACTED] is a WLIB community member</li> </ol>		
2018AFSAR3142 – Horseshoe Bend Enhancement and Restoration Project	Bridge River Indian Band	<p>This three year project application for Aboriginal Fund for Species at Risk Prevention Stream program is to develop off-channel rearing and refugia habitat for juvenile salmon within the Lower Bridge River (LBR), located within the Fraser River Watershed in the Pacific Region, starting summer of 2018-September 2021. The target species of this project are: Interior Fraser Coho Salmon, listed as threatened under COSEWIC and Fraser River Chinook Salmon, both listed as a regional priority species.</p> <p>The project goals are to develop restoration/enhancement plans, construct the restoration/enhancement area; conduct a project evaluation on stewardship activities.</p> <p>The objectives of the project are to develop an engineered design of the restoration/enhancement area, implement restoration/enhancement activities; and evaluate the effectiveness for future</p>		\$25,000

s.19(1)

s.20(1)(b)

s.21(1)(b)

Project - Title	Recipient	Objective	Total (AFSAR + Matching)	AFSAR
		stewardship work.		
		<p>The threats faced by these species include habitat loss, access to crucial refugia and rearing habitat. The main activities include: developing engineered plans; re-evaluating historical designs, engaging TEK in the development of plans; construction of restoration/enhancement area; and conducting a project evaluation study.</p> <p>Outreach activities would create juvenile rearing and refugia habitat for both species of salmon and mitigate further impacts to aquatic habitat. Stewardship actions involve the community participation in all activities in the restoration/enhancement area which help to conserve salmon and culture. The project anticipates the creation of crucial refugia and rearing habitat for the conservation of regional priority Fraser coho and chinook salmon species within the LBR. The expected results hope to mitigate threats, improve habitats conserve species, while strengthening indigenous culture and communities through participation and conservation.</p>		
2018AFSAR3202 - Improving Habitat Quality and Restoring Access for Chum Salmon in McCulley Creek	Gitksan Watershed Authorities	<p>This Aboriginal Fund for Species At Risk Prevention Stream project will address threats to inland North Coast chum salmon (a Pacific Region priority aquatic species) arising from climate change and habitat degradation. The project will restore chum salmon access to spawning and rearing habitat recently lost due to habitat changes, increasing the amount of available habitat for this species.</p> <p>McCulley Creek is a tributary to the Kispiox River in the Skeena Watershed. Historically, it has supported all inland North Coast chum salmon (a Pacific Region priority aquatic species not assessed by COSEWIC), Chinook salmon (not assessed), coho salmon (not assessed), pink salmon (not assessed), and steelhead trout (not assessed). Beginning in the 1990s, an avulsion event caused the lower portion of the creek to jump its channel and establish a new channel through an adjacent pasture. Whereas previously the flow was focused into a single channel, the current stream channel is heavily braided with each braid being relatively shallow. In low water conditions during the chum spawning period, the mouth of McCulley Creek is often impassible for spawning adult chum, limiting their ability to reach the upstream habitat. Climate change has increased the frequency and severity of low water years in the Skeena watershed, further exacerbating the impact.</p> <p>The project proposes to address these threats by carrying out a stream restoration project to concentrate the flow into a single channel, providing enough depth for migrating spawning chum</p>		\$28,400

s.20(1)(b)  
s.21(1)(b)

Project - Title	Recipient	Objective	Total (AFSAR + Matching)	AFSAR
		salmon even in low water years. Additional stream restoration components, such as woody debris, may be used to increase the quality of the stream habitat for rearing juvenile chum salmon. Outreach will include involving landowners in the restoration activities and providing advice on maintaining the health of the stream. The project will result in increased connectivity of McCulley Creek to the Kispiox River and the addition of more than 1.5 km of available habitat for inland North Coast chum salmon.		
2018AFSAR3194 – Seyem' Qwantlen Salmon River Habitat Enhancement Project	Seyem'Qwantlen Resources Ltd.	Seyem' Qwantlen Resources, as owned and operated by Kwantlen First Nation (KFN), will engage in a multi-phased fish and water quality study and riparian planting of the Salmon River, Davidson Creek and associated tributaries in Fort Langley, BC. The target species for this study is the federally threatened Salish sucker ( <i>Catostomus</i> sp.), however COSEWIC threatened Coho Salmon ( <i>Oncorhynchus kisutch</i> sp.) present in the watershed will also benefit from the enhancement works. It will fill data knowledge gaps through traditional knowledge gathering and on-the-ground monitoring for Salish Sucker, and will enhance and improve Salish Sucker habitat, and biodiversity, through replanting and bioengineering efforts.  This monitoring will take place between in Summer 2019, planting will take place in Fall 2019. KFN members along with Trinity Western students will collect and manage data focused on key threats to the Salish sucker and its habitat, including seasonal water loss, hypoxia, toxicity, habitat loss and increased predation. Information collected will be directed to the Recovery Team to identify critical habitat, areas of concern, and potential restoration opportunities. KFN members and TWU students will continue work as stewards of the Salmon River, building public support and outreach through participation in local public engagement events.		\$40,185

s.20(1)(b)  
s.21(1)(b)



**Pages 17 to / à 77  
are withheld pursuant to section  
sont retenues en vertu de l'article**

**23**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

**Hirani, Samia**

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**From:** Hirani, Samia  
**Sent:** Friday, August 24, 2018 2:07 PM  
**To:** Ministerial Briefing / Breffage ministériel (DFO/MPO)  
**Subject:** SARA  
**Attachments:** Atlantic Salmon MinO\_24 Aug 2018.ppt; SARA\_intro\_briefing\_for\_MIN\_24 Aug 2018.ppt;  
SRKW Min briefing\_24 Aug 2018.pptx; [REDACTED]  
[REDACTED]

s.69(1)(g) re: (e)

***Samia Hirani***

Senior Analyst // Analyste principale  
Office of the Deputy Minister // Bureau de la Sous-ministre  
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s.16(2)(c)

**Pages 79 to / à 93  
are withheld pursuant to section  
sont retenues en vertu de l'article**

**69(1)(g) re: (e)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**



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# **Species at Risk Act (SARA) and DFO Species at Risk Program: Overview and Current Context**

**Briefing for Minister Wilkinson**

**August 30, 2018**

**Canada**



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## Purpose

To provide:

- An overview of DFO's species at risk program
- Information on recent progress on species at risk at DFO
- Highlights of current hot issues and upcoming work
- A summary of the SARA process



Atlantic Wolfish

Canada

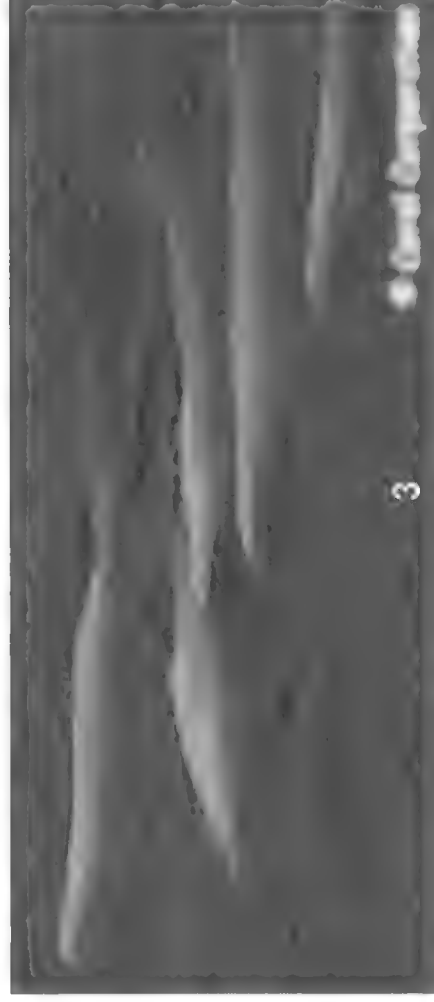


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# Legislative Framework for Species at Risk

- The purpose of SARA is:
  - To prevent wildlife species from being extirpated or becoming extinct
  - To provide for the recovery of wildlife species that are extirpated, endangered or threatened as a result of human activity
  - To manage species of special concern to prevent them from becoming endangered or threatened
- SARA came fully into force in 2004

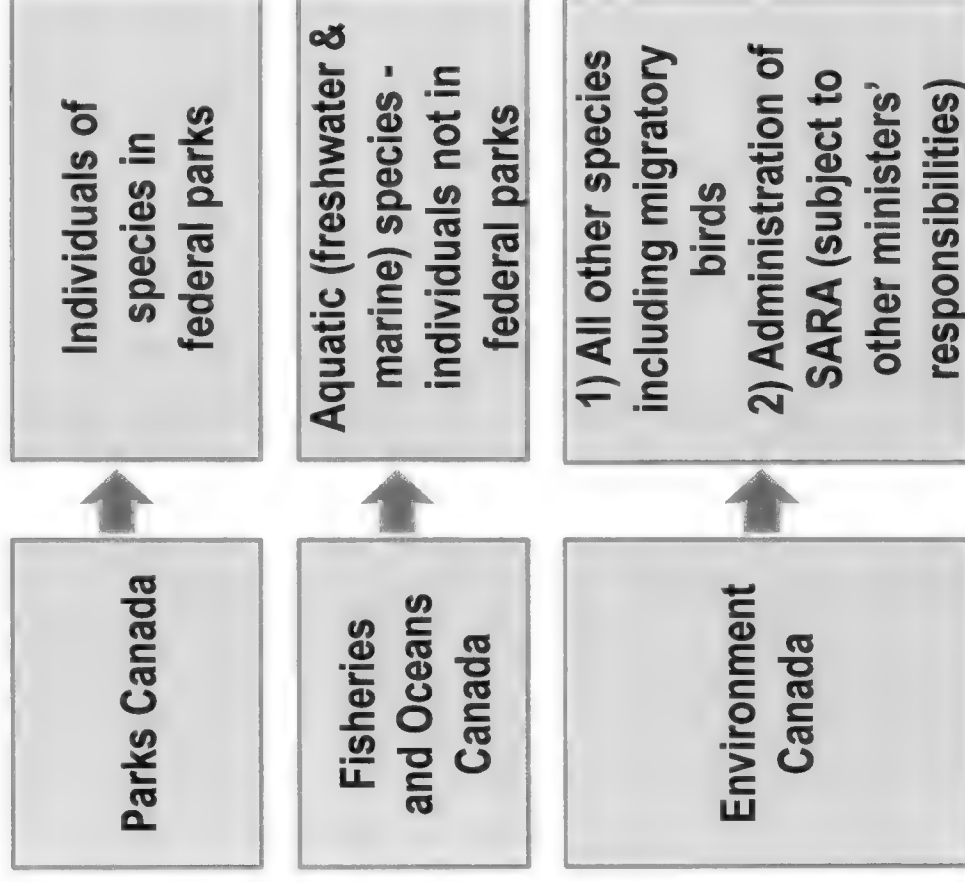


Beluga

Canada

# Governance

- SARA is administered by three Core Federal Departments
  - **Parks Canada Agency:** manages individuals of species found in or on federal lands it administers
  - **Fisheries and Oceans Canada:** manages aquatic species other than for those individuals found in Parks Canada waters
  - **Environment Canada:** manages all other species, including migratory birds, and is responsible for administration of the Act
- SARA refers to the ministers of these three departments as “competent ministers”





# Ministerial Responsibilities

- Minister of Fisheries and Oceans responsibilities are:
  - Provide recommendations/listing advice on aquatic species to the Minister of Environment
  - Provide draft response statements for aquatic species (to COSEWIC assessments) to Minister of Environment
  - Develop recovery strategies, action plans, management plans for aquatic species
  - Monitor and report on progress through Progress Reports
  - Implement and enforce protection measures applicable to listed aquatic species
    - Ministerial critical habitat orders
    - Prohibitions related to individual animals and critical habitat





# SARA in the Aquatic Context

- Application of SARA in the aquatic context is impacted by considerations often not at play in terrestrial contexts:
  - Many at risk aquatic species are directly or incidentally caught in commercial, recreational or indigenous fisheries – especially marine
    - e.g. rockfish (directed fishery); whales (entangled in trap fisheries)
    - prohibitions significantly impact coastal communities if applied
  - Department is regulator of activities that can harm aquatic species – fishing; activities in fish habitat (e.g. hydro-electric)
  - Constitutional division of powers makes federal government responsible for “sea coast and inland fisheries”
    - But often overlapping areas of provincial jurisdiction, so real solutions require both levels of governments’ involvement
      - e.g. water use; forestry; tourism
  - Courts *de facto* require ministerial critical habitat orders for aquatic species habitat protection



# DFO's Species at Risk Program

- There are 120 listed aquatic species
- Resources:
  - A Base: Yearly – 75 FTEs / \$14.6M SALARY & O&M
  - B Base: Over 5 years – 480 FTEs (150 renewed/330 new) and \$98.9M S&W+ O&M
  - Gs & Cs - \$5.9M / year blended A and B Base for application based stewardship program + \$55M B Base directed-funding for Nature Fund for multi-species approaches (new)
  - The Nature Fund will target larger, longer-term projects that promote collaboration and leveraging of resources by utilizing multi-species and ecosystem-based strategies;
    - focus on priority places, species and threats.
  - The Habitat Stewardship Program and the Aboriginal Fund for Species at Risk will continue to maintain external engagement more broadly through smaller, shorter-term stewardship and capacity building projects outside priorities of the NFSAR.



## Key Advisory Bodies

- Canadian Endangered Species Conservation Council (CESCC) – federal, provincial and territorial Ministers responsible for conservation and management of species at risk, including Minister F&O; does not meet regularly.
- Species at Risk Advisory Committee (SARAC) - multi-stakeholder
- National Aboriginal Council on Species at Risk (NACOSAR) – First Nations, Metis, off reserve/non-status
- Note: Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) is DFO main F/P/T entity, but has not traditionally addressed inter-jurisdictional species at risk issues



# Listing

- Have made significant headway in listing species...since November 2015, DFO has:
  - led on the listing of 11 new species; now 120 aquatic species listed
    - an additional two species were not listed due to their interactions with commercial fisheries
  - reclassified Humpback Whale from threatened to special concern
  - Batch 10 (freshwater species) proceeding now
- BUT almost as many COSEWIC-assessed species require listing
- Upcoming challenging listing decisions
  - many harvested, and many are fished by indigenous groups. Examples:
    - Atlantic Salmon and Eulachon (Batch 11 in development)
    - American Eel
    - Pacific Salmon
    - Cod and other groundfish
- Timelines are tight: New standard of 2 or 3 years depending on complexity
  - Driving planning for how to batch species



# Recovery and Protection

- Since November 2015, DFO has:
  - Department has posted documents for 55 out of the proposed 64 species identified on the Posting Plan (86% complete)
  - published:
    - Recovery Strategies for 9 species; Action Plans for 47 species; Management Plans for 10 species
    - Recovery Strategy Progress Reports for 22 species; Management Plan Progress Reports for 6 species
  - protected critical habitat of 17 species by making Critical Habitat Orders
  - issued 239 permits for activities that benefit species, including 176 for research
- BUT...still have substantial number of overdue recovery documents (as of August 1, 2018):
  - Recovery Strategies for 3 species
  - Action Plans for 12 species
  - Management Plans for 3 species
  - Progress Reports for 33 species
- 31 Critical Habitat Orders are in development, 12 of which are overdue



## Key Challenges for DFO

- Balancing the interests of industrial sectors / indigenous groups with the recovery of species
  - Restrictions on commercial, recreational, and Indigenous fisheries are sometimes needed to facilitate recovery but extremely difficult to institute
  - Bycatch of species at risk in commercial fisheries a particular concern
  - Managing other uses of the aquatic environment in a manner that allows for recovery
    - hydro, oil & gas, shipping, major projects all present challenges
  - *To achieve balance it is sometimes preferable to manage for the recovery of aquatic species under the Fisheries Act (Do Not List)*
- Filling knowledge gaps, particularly for marine species
- Indigenous and treaty rights
- Threats of litigation and public scrutiny on the management of iconic species or high profile sometimes drive the agenda



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## Current Hot Issues

- Emerging trend: Species at risk are at centre of conservation debate, particularly around major projects
  - e.g. Cacouna terminal (proposed Energy East pipeline); Montreal and Québec City port expansions - impacts on St. Lawrence Estuary Beluga whales
- Emerging trend: Use of pressure for emergency listing and protection orders as tool for advancing agenda:
  - Southern Resident Killer Whale
    - [REDACTED] s.69(1)(g) re: (a)
    - [REDACTED] s.69(1)(g) re: (e)
    - Ecojustice has threatened litigation if no order is forthcoming (containing desired measures)
  - Chilcotin and Thompson Steelhead Trout
    - Assessed as endangered by COSEWIC in an emergency assessment in February 2018
    - [REDACTED] s.69(1)(g) re: (d)
    - [REDACTED]
    - [REDACTED]
- North Atlantic Right Whale
  - Interactions with fishing gear, pressures from both fishing industry and ENGOS
  - Interactions with shipping, concerns from shipping industry, relationship with Transport Canada
  - Safety concerns about whale disentanglement

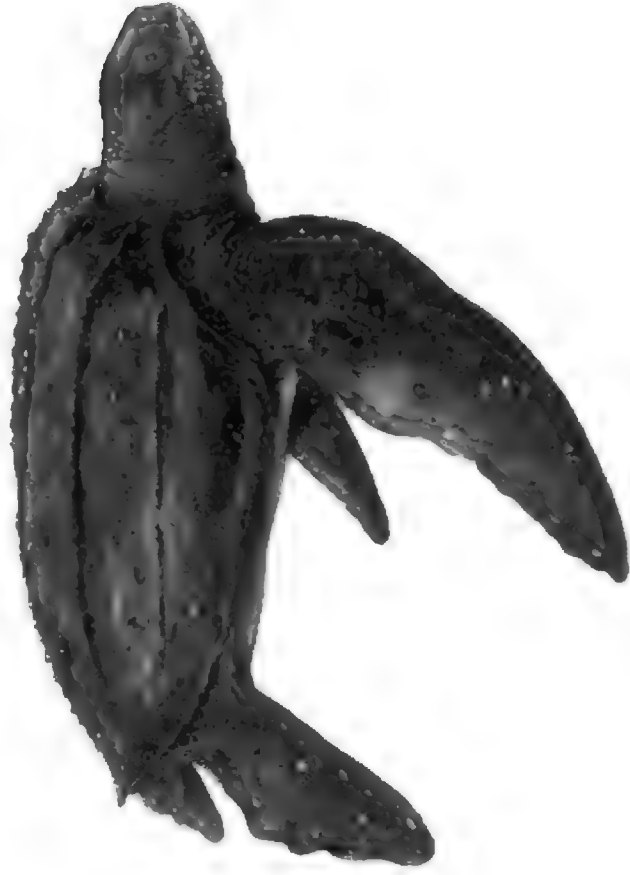


# Nature Legacy

- In June 2018 Treasury Board approved funding of \$1.09 billion over five years, beginning in 2018-19, to deliver the “Nature Legacy for Canada”.
- DFO has been approved for \$154.8M over 5 years for: renewing and supporting the Species at Risk Program; Grants & Contributions funding for the “Canada Nature Fund”; funding to transition from recovery planning to protection and recovery actions;
- Resources to be focused on priority areas, species and threats for best value on investment.
- Also, B Base portion of existing Grants & Contributions programming for aquatics renewed (\$4.3M over 5 years); will flow directly to DFO.
- Next Steps are:
  - Development of a prioritization framework to identify 3 priority spaces, 2 priority threats and 2 priority species
    - key stakeholders and Indigenous groups will be engaged
  - Creating networks with external partners for delivery on priorities
  - Identify “early wins”
  - Redefining internal organizations
  - Establishing DFO’s Nature Legacy Grants & Contributions Funding Program and adopting the existing Habitat Stewardship Program and Aboriginal Fund for Species at Risk;
    - capacity issues for program delivery will need to be addressed.



## ANNEX – BACKGROUND INFORMATION



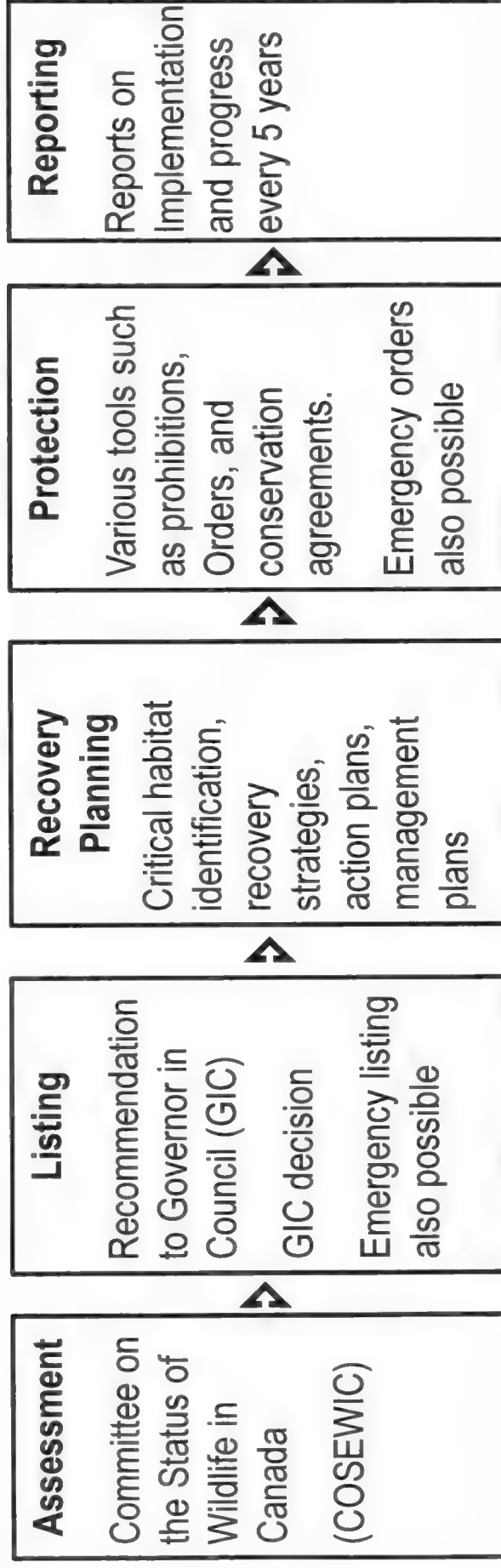
Leatherback Sea Turtle



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# The SARA Process



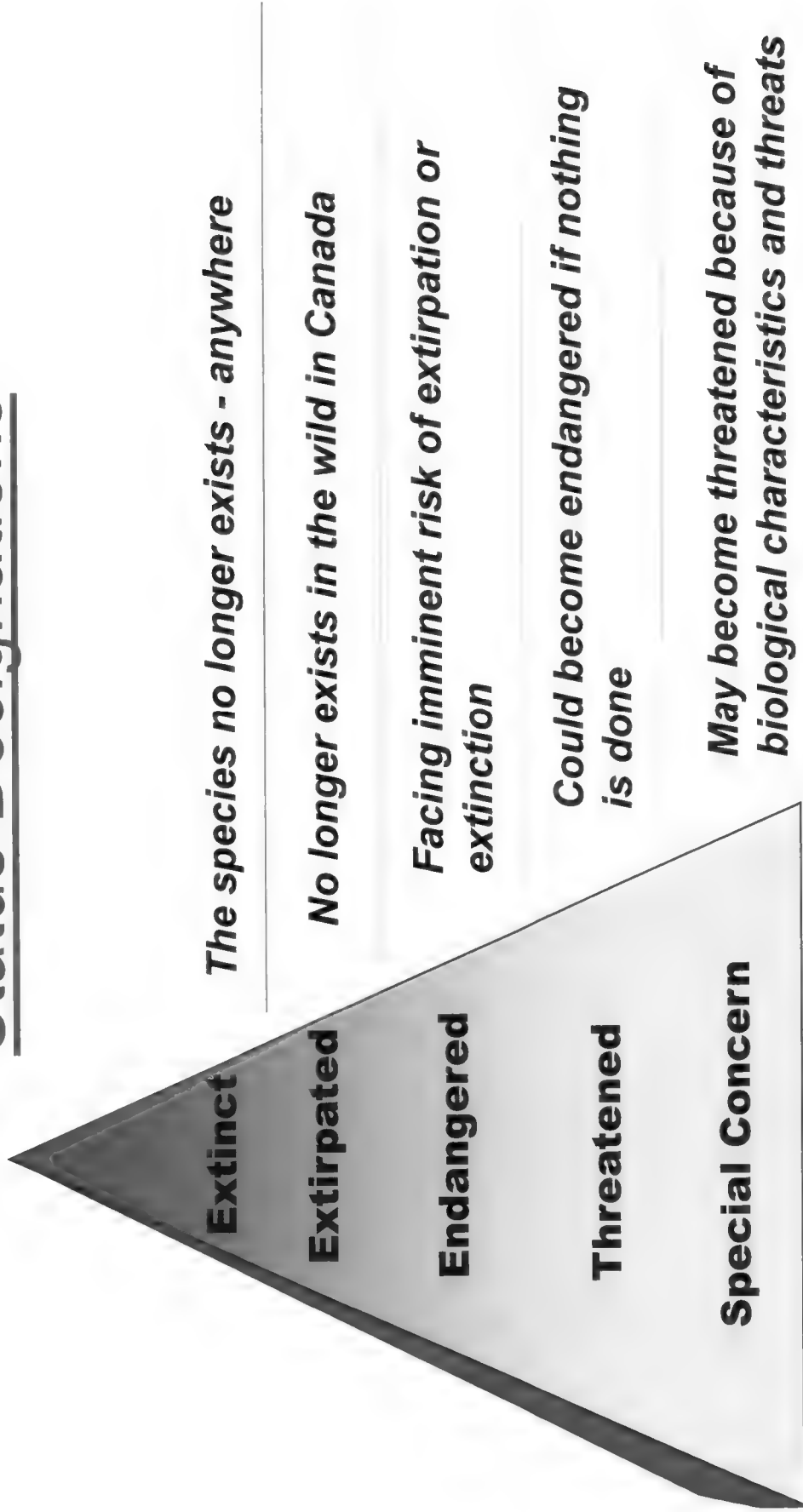
Northern Madtom



# Assessment

- The status of species are assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), an independent committee of scientists and experts
  - Species may be assessed as **extinct, extirpated, endangered, threatened, of special concern, data deficient or not at risk**
  - Can apply to species as a whole, or a population of a species (called a “designatable unit”)
- COSEWIC Report triggers the process for Response Statement by Minister of Environment
  - Within 90 days of receipt, the Minister of the Environment must publish a response statement on the SARA Registry indicating the next steps for each of the assessed species
  - The response statement indicates the various stakeholders to be consulted prior to making a listing recommendation
  - Specifies whether listing decisions will follow *normal* or *extended* timelines, usually based on the scope of consultations and socio-economic analysis required

# Status Designations





## Listing

- Legal listing of a species occurs when it is added to Schedule 1 of SARA; this constitutes regulatory action.
- Government must make one of the following decisions:
  - List the species at the status assessed by COSEWIC;
  - Decide not to list;
  - Return the assessment to COSEWIC for further consideration.
    - This can only be done if there is information that COSEWIC did not consider when the assessment was made which will likely lead to a change in the species status.
- **DFO has developed a Listing Policy and Directive for Do Not List Decisions**
  - DFO recommends listing as a default, unless there is a compelling rationale not to list
    - for example, if the species is by-catch in a commercial fishery, and there would be negative economic effects of shutting down the fishery
  - If a species is not listed, DFO must provide an alternative approach for managing it
    - Usually this means managing the species under the *Fisheries Act* with the use of rebuilding plans



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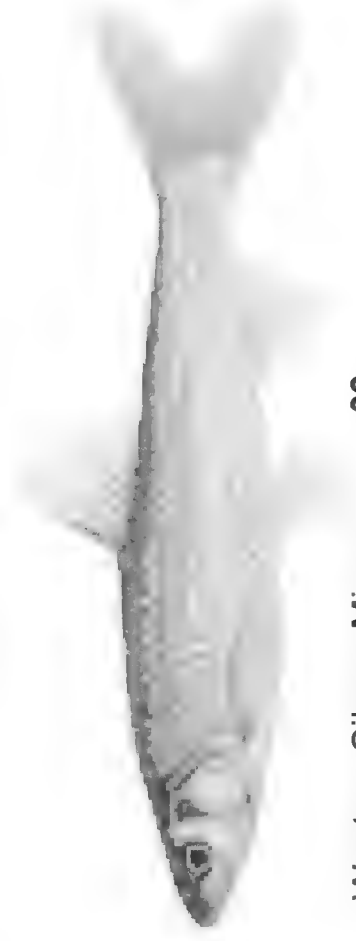
# Listing Process

- DFO undertakes analysis and consultations prior to providing listing advice to its Minister.  
This may include:
  - Recovery Potential Assessment
    - provides scientific information outlining what is necessary to recover the species;
  - Analysis of socio-economic impacts of listing the species; and
  - Consultations with stakeholders on their views on listing the species
  - Management scenarios – to look at what it would take to achieve stable/recovering population on various timelines
- The Minister of Fisheries and Oceans provides advice to the Minister of Environment on listing decisions for aquatic species
- The Minister of Environment makes the recommendations for all species listing decisions to the Governor in Council
- It is Government of Canada policy that a listing decision is made within 24 months of the COSEWIC report being finalized or 36 months if extended consultations are needed.
  - most aquatic species will require extended consultations



## General Prohibitions

- Listing of species as Extirpated, Endangered or Threatened triggers automatic prohibitions under SARA against:
  - killing, harming, harassing, capturing or taking (ss. 32(1));
  - possessing, collecting, buying, selling or trading (ss. 32(2));
  - damaging or destroying the residence of an individual of the species (s. 33)
- Prohibitions come into force immediately upon listing
- Prohibitions do not apply to species of Special Concern



Western Silvery Minnow



# Recovery Planning

- Once a species is listed as threatened, endangered, or extirpated, a Recovery Strategy and one or more Action Plan(s) must be prepared
- Recovery Strategies describe the species and its threats, identify its critical habitat, set population and distribution objectives, and provide a description of research and management approaches needed to attain those objectives
  - Recovery strategies must be completed within 1 year of listing for endangered species, and 2 years for threatened and extirpated species
- Action Plans describe measures to be taken to implement the recovery strategy, and include a socio-economic evaluation
  - The deadline for the Action Plan is set in the Recovery Strategy
- When a species is listed as Special Concern, a Management Plan containing measures for the conservation of the species must be prepared within 3 years

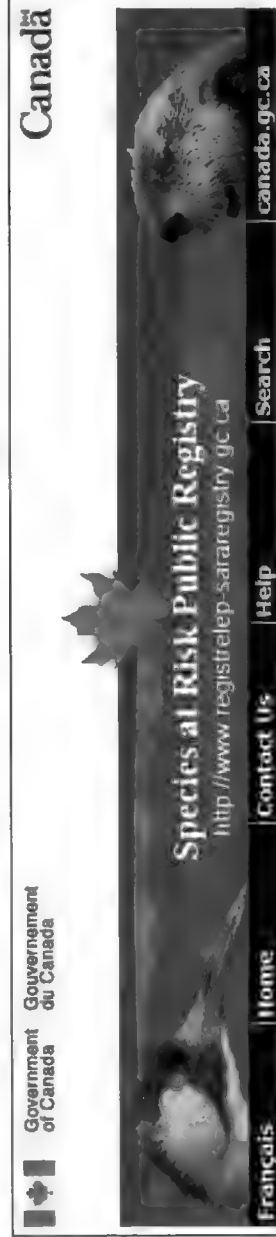




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Extirpated, endangered, threatened



Special Concern



Canada



## Critical Habitat Identification

- “Critical habitat” is defined as the habitat necessary for survival or recovery of the species and is identified in the recovery strategy or action plan
- The competent minister is required to identify critical habitat in a Recovery Strategy to the extent possible based on the best available information
  - typically this will include geographical information, as well as functions, features, and attributes of the habitat that make it critical to the species
  - if available information is not adequate to identify critical habitat, the Recovery Strategy must contain a Schedule of Studies for identifying critical habitat
- The Recovery Strategy must also contain examples of activities likely to result in the destruction of critical habitat
- If available information is not adequate to identify critical habitat in the Recovery Strategy, it will be identified in either the Action Plan, or a later amended Recovery Strategy



## Protection of Critical Habitat

- Critical Habitat must be protected within 180 days of the final Recovery Strategy or Action Plan containing its identification being posted on the SARA Public Registry
- According to SARA, the critical habitat may be protected by:
  - the competent minister making an Order enacting ss. 58(1) of SARA unless already legally protected or under other Act of Parliament
    - In reality, since the Courts have ruled that other protection to be considered acceptable must be equivalent to SARA critical habitat orders in effect; alternatives to an Order are almost never used
- Paragraph 58(1)(b) of SARA states that no person shall destroy any part of the critical habitat of an aquatic listed species



## Permitting under SARA

- Under section 73 of SARA a permit is required to undertake an activity that would otherwise violate a SARA prohibition. A number of conditions need to be met before the permit can be issued.
- The *Permits Authorizing an Activity Affecting Listed Wildlife Species Regulations* require that a permit is issued or refused within 90 days (with some exceptions).
- Section 74 of SARA allows for an authorization issued by the competent minister under another Act of Parliament to have the same effect as SARA permit provided that the conditions of section 73 can be met.
  - This means that a fishing licence or Fisheries Act Authorization can also act as a SARA permit



# Exceptions and Exemptions

SARA allows exemptions and exceptions to its prohibitions for:

- activities related to public safety, health, and national security that have been authorized under another Act of Parliament
  - however, they must respect SARA to the greatest extent possible
- conservation measures provided for under a land claims agreement
- certain possession exceptions
  - e.g., by zoos and museums who acquired the individual legally
- activities specifically permitted in a recovery strategy or action plan that are also authorized under another Act of Parliament.
  - this provision has been used to exempt research activities, monitoring, and by-catch
  - it is DFO policy that any activity exempted in a recovery strategy is compatible with recovery and meets the requirements of s.73(3)



## Emergency Listing

- Under s.29 of SARA, if the Minister of Environment forms an opinion that there is an imminent threat to the survival of a species, then after consulting with the Minister of Fisheries and Oceans, the Minister must recommend to Governor in Council to list the species on an emergency basis
- Opinion is formed based on a COSEWIC assessment and any other relevant information
- GiC may consider other factors (e.g., socio-economic analysis, expected impacts on stakeholders) in making a final listing decision



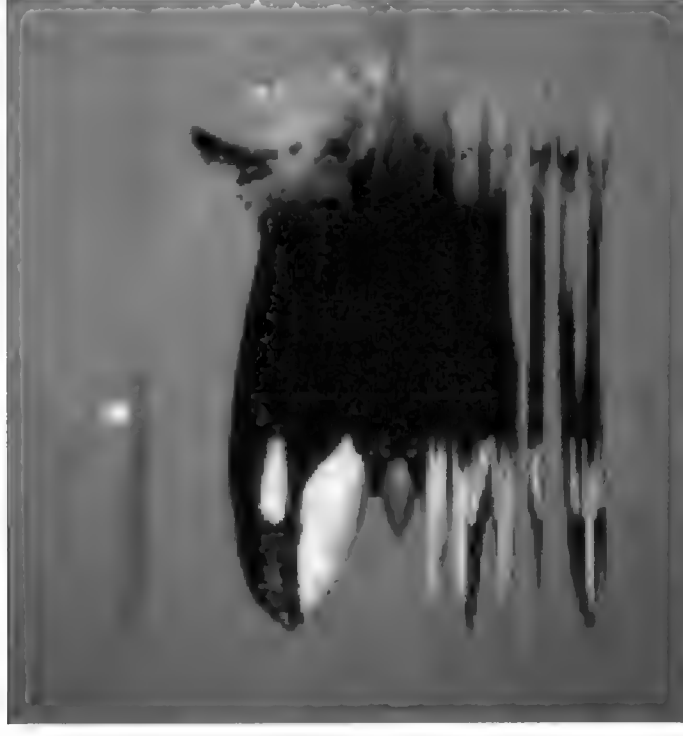
## Emergency Protection

- Under s. 80 of SARA, if the Minister of Fisheries and Oceans is of the opinion that there is an imminent threat to the survival and recovery of a **listed** species after consulting with other competent minister(s), the Minister must recommend to Governor in Council to make an emergency protection order.
  - unless the Minister(s) is of the opinion that equivalent protection is in place under another Act of Parliament
- The order may:
  - Identify habitat necessary for survival or recovery
  - Require the doing of things to protect the species and habitat
  - Prohibit activities



## Monitoring & Evaluation

- SARA requires the competent minister to assess and report on the implementation of:
  - a Recovery Strategy, every five years from its date of publication until the objectives are achieved or the species' recovery is no longer feasible;
  - an Action Plan, five years after the plan comes into effect; and
  - a Management Plan, every five years from its date of publication until its objectives are achieved.



Northeast Pacific Transient Killer Whale



Thank you



Westlope Cutthroat Trout

**Pages 124 to / à 141**  
**are withheld pursuant to sections**  
**sont retenues en vertu des articles**

**69(1)(g) re: (d), 69(1)(g) re: (e)**

**of the Access to Information Act**  
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**Longtin, Jean**

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**From:** Reid, Rebecca  
**Sent:** Friday, October 5, 2018 10:20 PM  
**To:** Blewett, Catherine; Stringer, Kevin  
**Cc:** Fogliato, Cara; Morel, Philippe; Lapointe, Sylvie; Kahn, Zoe; Thomson, Andrew  
**Subject:** FW: FOR APPROVAL: Pacific Region Operational Issues - Week of October 1, 2018

Colleagues – following please find an operational update of issues in the Pacific Region for the week. Attached also is the weekly salmon operational update.

**Trans Mountain Expansion Project: Fish Kill at Westridge Marine Terminal**

A fish kill was reported at Westridge Marine Terminal during shutdown activities. On September 20, 2018, Trans Mountain commenced shutdown of construction activities at the Westridge Marine Terminal in Burrard Inlet as a result of the recent Federal Court of Appeal decision which set aside the Governor in Council approval of the Trans Mountain Expansion Project (TMX). This decision effectively also rendered null the *Fisheries Act* authorization issued for expansion of the terminal in September 2017. As part of the shutdown activities, Trans Mountain has been undertaking fish salvage activities.

[REDACTED]

**Consultation on Amended *Recovery Strategy for the Northern and Southern Resident Killer Whales***

The public comment period on Section 7 (Critical Habitat) of the proposed amended *Recovery Strategy for the Northern and Southern Resident Killer Whales in Canada* is underway until November 3. A number of public and First Nations meetings have been planned. On September 28, the Sport Fishing Institute of BC issued a "Members Update" announcing the launch of an SRKW "true facts" website and calling on its large membership base to attend the community meetings and submit written comments calling on the federal government to slow its process and focus on predation and prey production.

[REDACTED] The Minister should expect correspondence from stakeholder and Indigenous groups regarding the extent of engagement, criticism over perceived scientific shortcomings in the identification of critical habitat, and concern over implications of potential fisheries management measures for coastal communities, and assertions of rights infringement. Two community consultation sessions were held this week – in Port Alberni, and Ucluelet. About 100 participants attended each, primarily recreational fishermen. The tone of the discourse was markedly different from the previous round of consultation, when participants were interested in understanding the issue and open to solutions. At these sessions, there was considerably more hostility, fear and anxiety by the participants who felt they were given inadequate time to provide meaningful input. The recreational harvesters felt they bore the majority of the impacts this summer, and feared the economic impact to small communities from addition fishing closures based on the larger proposed critical habitat area.

s.16(1)(c)

s.21(1)(a)

s.21(1)(b)

**Update on SARA Consultation on the Potential Emergency Listing of Thompson and Chilcotin Steelhead Trout**

Thompson and Chilcotin Steelhead were emergency assessed as **Endangered by Committee on the Status of Endangered Wildlife in Canada (COSEWIC)** in January 2018 owing to the 79% estimated decline of spawners for the Thompson DU (177 spawners returned in 2018), and 81% for the Chilcotin DU (58 spawners returned in 2018).

A response has been delayed to enable completion and publication of the Canadian Science Advisory Secretariat (CSAS) Emergency Recovery Potential Assessment (Science Advisory Report) – currently expected late October.

, public consultations are occurring online and in person from October 1<sup>st</sup> – December 2<sup>nd</sup>, jointly with the Province of BC. Intent is to review draft management measures, seek input to inform a cost-benefit analysis, and gather cultural information. Listing would trigger prohibitions, which will have direct limiting implications on commercial; Indigenous food, social, and ceremonial (FSC); and recreational fisheries, with significant socio-economic impacts. First Nations and stakeholders will be displeased that consultations and engagement sessions are limited. Both the publication of the recovery potential assessment and the consultations are expected to generate public interest - media lines have been prepared.

s.69(1)(g) re: (d)

#### **LNG Canada Project in Kitimat, B.C.**

On October 1<sup>st</sup>, 2018, Liquefied Natural Gas (LNG) Canada's joint venture participants (Shell, PETRONAS, PetroChina, Mitsubishi Corporation and KOGAS) announced a positive final investment decision, giving the Project the green light to move forward to construct and operate a natural gas liquefaction facility and marine terminal for the export of liquefied natural gas (LNG) in Kitimat, B.C. Both federal and provincial environmental assessment decisions were issued on June 17, 2015. The federal review determined that the Project was likely to cause significant adverse environmental effects related to greenhouse gas emissions; however, these effects were justified in the circumstances. DFO has issued four *Fisheries Act* Authorizations to LNG Canada for impacts to fish and fish habitat for this project. No further *Fisheries Act* Authorizations are expected to be required. The Proponent proposes to adhere to standard mitigation measures to limit adverse effects on fish and fish habitat and to address unavoidable impacts through an extensive offsetting program including freshwater, estuary and marine components. The offsetting program also includes eulachon research as a complementary measure. DFO and the Canadian Environmental Assessment Agency will participate in compliance and efficacy monitoring and enforcement activities for this project. The marine terminal component of the Project lies entirely within the asserted traditional territory of the Haisla Nation. The Haisla Nation support the project and have entered into an Impact Benefit Agreement with LNG Canada. The reaction to the Project is generally positive, however the local DFO Prince Rupert Office have received visits from individuals opposed to the Project.

#### **Update on Commercial Geoduck Fishery in Kulleet Bay – Risk of Protests by Local First Nations**

The Underwater Harvesters Association (UHA) has requested DFO open the commercial Geoduck fishery in Kulleet Bay, located by the town of Chemainus, Vancouver Island. Biotoxin testing has been completed and levels were low enough to allow a fishery. This fishery has previously resulted in protests by the local Stz'uminus First Nation. The Nation's Chief and advisors have clearly indicated that they continue to be opposed to the commercial fishery in Kulleet Bay and that further protests are a possibility. Discussions between DFO, the UHA, and the Stz'uminus First Nation have identified potential long-term solutions to address the concerns of the Nation, however these cannot be implemented this year. DFO is looking at opportunities for quota for the UHA to be harvested elsewhere, while continuing the discussions with all parties for long-term solutions. The RDG has agreed to maintain the area closed this year, because of concerns we could not ensure an orderly and well managed fishery in the Bay.

## **Update Ecstall River - Catch and Release Fishery that Occurred Under Designation Issued by Lax Kw'alaams**

### **First Nation**

The designation by Lax Kw'alaams that resulted in guests of Komaham Lodge participating in a catch and release fishery in the Ecstall, an area closed to recreational fishing for Chinook conservation reasons, continues to garner attention from all sectors, and most notably the recreational sector. Concerns over a potential loophole in the *Aboriginal Fishing Licence Regulations* and implications of the incident to undermine conservation measures top the list of concerns. It has also garnered the attention of local MP Nathan Cullen, who has called on the department to investigate through local media. The Mayor of Lax Kw'alaams has received a letter from the North Coast Area Director outlining the department's position that this designation did not meet the intent of a food, social and ceremonial (FSC) communal licence, nor does it foster the collaborative relationship that the Nation has requested of the Department. Lax Kw'alaams has not responded.

### **Simulating the Impact of Tsunamis on Coast Guard Bases in British Columbia**

Recent publication of work by DFO scientist on tsunami modeling on the coast of British Columbia will help to inform future redesigns of CCG stations and contribute to modeling led by Defence Research and Development Canada's Canadian Safety and Security Program. The recent earthquake and tsunami around central Sulawesi, Indonesia, on September 28, highlights the potential threats to coastal British Columbia from similar seismic events in the NE Pacific. Over the last year, scientists from DFO's Institute of Ocean Sciences have conducted updated modelling studies to simulate the expected tsunami waves generated by off-shore earthquakes around the BC coastline. This work has recently led to the publication of a series of reports detailing the predicted tsunami wave amplitude and timing for Coast Guard bases at Seal Cove and Victoria, British Columbia, under different high risk earthquake scenarios. An example of the results from simulations of a Cascadia Subduction Zone earthquake event are that, under one scenario, the predicted maximum wave height at CCG Base Victoria will be 1.72-2.26 m above the normal tidal level occurring around 90 minutes after the start of the earthquake. These studies, which integrate information and expertise from Ecosystem and Ocean Sciences, Canadian Hydrographic Service and Natural Resources Canada, will help inform future redesigns of these stations and mitigate the impact on the operability of these stations in the event of a major disaster. Additionally, this work will contribute to the new national program on Flood Hazard Risk Models for Resilience on Canadian Coasts being led by Defence Research and Development Canada's Canadian Safety and Security Program.

#### **HEADS UP #15: PACIFIC REGION WEEKLY SALMON AREA UPDATES**

**OCTOBER 4, 2018**

**INTERNAL UPDATE/NOT FOR PUBLIC DISTRIBUTION**

#### **SYNOPSIS**

**Fraser River:** Interior Fraser River Coho window closure is in effect as per the IFMP. Fraser River gill net fisheries are not permitted during the closure. FSC and economic opportunity Sockeye fisheries are nearing completion in Marine areas and the lower Fraser River while FSC and commercial demonstration fisheries in the interior are ongoing. The Interior Fraser Steelhead window closure is in effect as per the IFMP. This closes all rec and commercial fisheries in the Lower Fraser areas, and limits FSC gill nets.

**West Coast of Vancouver Island:** The 2 year out forecast indicates low levels of abundance for WCVI AABM Chinook for the 2018/2019 Chinook year. Area G is not planning winter fisheries at this time as their total TAC based on the forecast and the current allocation approach is 8,400 Chinook. This number will be updated in April with the in-season AI but if it is consistent, there will be very little fishing opportunity for Area G in 2019. On a conference call with the Harvest Committee this week, harvesters reacted negatively as expected. Further correspondence from this group to the Ministers office can likely be expected in the near future.

**East Coast of Vancouver Island:** Johnstone Strait Chum test-fishing catches continue to be poor and tracking below the 2010 levels encountered during a similar time period. Area B seine, and Area H troll openings were suspended this week. The Area D gillnet opening scheduled for next week will be suspended. South Coast staff has notified the US and will communicate this in a formal process if abundance does not reach the 1.0 million threshold identified in Chapter 6 of the Pacific Salmon Treaty. The Interior Fraser Steelhead window closure is in place for Area D.

**Northern BC:** Commercial fisheries are closing down for the season. No more fisheries are anticipated in Central Coast, pending final catch estimates from Area F troll fleet (due Oct 5). Continued correspondence regarding Komaham Lodge and Bass Pro Shop guests fishing Ecstall River.

**Thompson and Chilcotin Steelhead:** Consultations to collect feedback on the potential SARA emergency listing of Thompson and Chilcotin Steelhead and its implications will take place Oct 1 - Dec 2 to meet regional deadline of Dec 31 for listing advice. A finalized Recovery Potential Assessment (RPA) has not been finalized at this stage. Once published, the RPA and consultations are expected to generate public interest.

#### FISHERY OPENINGS SUMMARY

The above synopsis is intended for internal DFO use only. For specific opening details, always refer to the applicable Fishery Notices. Note that this report does not include T'aaq-wiihak openings; see Key Salmon Fishery Issues below.

Area D Gillnet was open (with effort limited to 8 vessels) in Areas 25 and 26 on Tuesday and Wednesday, targeting Chum. There were 8 vessels hailed-out for Wednesday.

Area E Gillnet was open in Areas 21 and 121 on Monday, targeting Chum. Retention was also permitted for Pink. There were 96 vessels hailed-out for Monday.

Area F Troll was open (by ITQ) in Areas 1, 2, 101 and 142 on Sunday, targeting Coho, Pink, Chum and Chinook. There were 13 vessels hailed-out for Sunday.

Area F Troll was open in Areas 3, 102, 103, 104, 105 and 106 on Sunday, targeting Coho and Pink. Retention was also permitted for Chinook. There were 4 vessels hailed-out for Sunday.

Area G Troll was open in Areas 123, 124, 125, 126 and 127 on Sunday, targeting Chinook. Retention was also permitted for Sockeye, Pink and Chum. There was 1 vessel hailed-out for Sunday.

Area H Troll was open in Areas 12 and 13 on Sunday, targeting Chum. Retention was also permitted for Pink. There were 0 vessels hailed-out for Sunday.

#### KEY SALMON FISHERY ISSUES - BY AREA

## **NORTH COAST AREA**

- Haida Gwaii: no terminal net fisheries in 2018, FN to close for the balance of the season expected next week.
- Central Coast: no further commercial fisheries anticipated, FN to close for the balance of the season expected next week.
- Babine Lake ESSR has concluded. The total catch was ~194,000

## **SOUTH COAST AREA**

### **West Coast Vancouver Island (WCVI)**

#### **Area 21 Nitinat Chum**

- Gill net fishery on October 1 very poor, 96 vessels caught approx. 560 Chum
- Due to these low catch rates and current escapement levels into Nitinat Lake, there are no commercial fisheries planned for the week of October 7 to the 14.
- Escapement into Nitinat Lake up to October 1 is estimated at about 40,000 Chum, below the October 6 target of 75,000.
- Early fishery results and observed escapement to Nitinat Lake suggest the run size is lower than the 187,000 pre-season forecast.
- No further fisheries will be planned until weekly escapement benchmarks into Nitinat Lake have been reached.

#### **Area 23 Coho:**

- No fisheries last week
- Roundtable this week to discuss potential Coho opportunities

#### **Area 25/26 Chum:**

- Limited effort Chum fisheries started last week in Esperanza (Area 25) and Kyuquot (Area 26) and are continuing this week
- Esperanza Inlet:
  - 4 vessels operating this week (no First Nation vessel identified yet)
  - First fishery opened September 25/26, fishing for 10.5 hours on day 1 and 5 hours on day 2 (total catch 882 Chum); similar to last year, however last year had 2 full days of fishing)
  - Second fishery opened October 2/3
- Kyuquot Sound:
  - 4 vessels operating this week (3 Area D vessels + 1 local First Nation vessel with an Area D licence)
  - Fishery opened September 25/26 for 10.5 hours each day (total catch 1,019 Chum for 4 vessels); similar to last year
  - Second fishery opened October 2/3

#### **T'aaq-wiihak:**

- Currently no salmon fisheries are open.
- Fisheries currently being planned for Burman Chum and inside Coho

#### **Area G Troll:**

- AABM Chinook fishery opened Sept 15, and closed Sept. 30, the catch target of 3,500 Chinook was not achieved (CTD 2,590 Chinook); 910 short
- Area G harvest committee meeting this morning regarding the winter Chinook fishery
- The winter fishery is planned to take no more than 20% of the Area G share based on the 2 year out forecast for the WCVI AABM as the actual in season AI is not available until early April.
- 2 year out forecast is 0.57 or 85,351 Chinook, with the additional 12.5% reduction that will come along with the new Chapter 3 of the PST the rough forecast is 74,700 resulting in a TAC for Area G of 8,400.
- At this level it is unlikely that Area G will plan for any winter fisheries
- Additionally, if the in-season AI is consistent with the 2 year out forecast we may need to consider things such as the September hold back and if that still makes sense.
- It is expected that Area G will have a negative reaction

#### **East Coast Vancouver Island (EVC)**

- Interior Fraser Steelhead window closure is in place for Area D in Areas 12 (until Oct 8) and Area 13 (until Oct 13)
- Terminal Chum demo fisheries may occur in Saanich Inlet and Cowichan
- Discussions are underway to potentially allow for a terminal Chum fishery if abundance picks up in Johnstone Strait

#### **Fraser Interior Area**

##### **Lower River**

- Interior Fraser Coho window closure came into effect Sept 4 below Mission, Sept 6 below Hope Bridge, and Sept 8 below Sawmill Creek as per IFMP.
- Below Port Mann (BPM)
  - o Limited selective fishing for Sockeye/Chinook directed fisheries have been planned and continue.
- Above Port Mann to Sawmill (APM)
  - o Interior Fraser River Steelhead window closure came into effect September 28 below Mission, September 29 below Hope Bridge, and October 3 below Sawmill Creek constraining FSC fisheries to selective gear only.
  - o There is no Economic opportunity for any gear types, including selective gear within this window closure.
  - o Current estimated catch to Sept 24 from the Mouth to Sawmill Creek is 305,600 (FSC) and 240,133 (EO) Sockeye.
- Current preliminary Sockeye catch to Sept 11 for Lower River (BPM & APM combined total) is 314,777 (FSC) and 235,066 (EO/DEMO).

##### **Mid-River**



- NNTC, NTA, Nicomen, & Lower Nicola Indian Band, on the Fraser from Sawmill Creek to Texas Creek, and Thompson downstream of the Bonaparte, have been issued a Chinook and Sockeye-directed Dip Net license from Oct 1 to Oct 12. Steelhead window closure will come into effect on the Fraser from Sawmill to Lytton Oct 5th. Total FSC harvest of 1,332 Chinook and 113,359 Sockeye to the week ending September 23.
- Interior Fraser Coho closure in effect at St'at'imc from Texas Creek to Kelly Creek, and Barney Creek to French Bar Creek. Only selective fisheries will be considered when planning future FSC opportunities.
- The Thompson upstream of the Bonaparte: Skeetchestn has been licensed to fish Sockeye and Chinook using a beach seine from October 1-11, after which the Steelhead closure comes into effect (October 12).
- Secwepemc Fisheries Commission Commercial Fishing Enterprise "River Fresh" opened August 31st until further notice on Kamloops Lake. Sockeye directed with Chinook non-retention using purse seines. Approximate Sockeye catch of nearly [REDACTED] Sockeye to date.

#### **Upper Fraser**

- FSC licences for Sockeye directed fisheries in place until October 31.

#### **Okanagan/ Columbia Watershed**

##### **Okanagan:**

- Approximately 193, 816 Sockeye have passed Bonneville Dam, and 153,620 Sockeye have passed Wells Dam. The Okanagan Nation Alliance has been licensed to fish Sockeye and Chinook using traditional gear from July 15<sup>th</sup> to October 13<sup>th</sup>. The Communal license was amended to allow for the retention of Sockeye bycatch.

#### **Fraser River Recreational Fisheries:**

- Tidal waters: Closed to fishing for salmon September 28 to October 24.
- Non-Tidal waters of the Fraser River (Region 2): Closed to fishing for salmon September 29 to October 25.
- Fraser River mouth: closed to fishing for salmon until October 24.
- Thompson-Nicola (Region 3): All Salmon fisheries now closed for the season.

#### **Yukon and Transboundary Area**

##### **Yukon River**

**Yukon River Mainstem Chinook:** Season is complete. Pre-season forecast was for a low run size of 71,000 - 103,000. US fishery opportunities were significantly reduced. Assessment at Eagle sonar (near CDN border) was below long term average for passage for the season. US met border obligation (42,500 to 55,000) with a cumulative passage estimate of 58, 092. Precautionary management was applied by FN governments. No openings were provided in the recreational, commercial or domestic fisheries.

**Porcupine River Chinook:** Sonar Assessment project is complete for Chinook, cumulative passage estimate was 3,393 which is below average. A small FSC fishery occurred. There are no recreational or commercial fisheries in this drainage.

**Yukon River Mainstem Chum:** As of Oct 2, 2018 Run is tracking about a week late, in season estimate of border escapement is 104,866; run will surpass the upper end of the IMEG (70,000 to 104,000), but likely to come in much lower than pre-season forecast. Commercial, Domestic and Recreational fisheries are open. Commercial fishery opened on August 31 and is anticipated to remain open for the season; commercial catch reported at 1100 Chum as of October 2, 2018.

**Porcupine River Chum:** Run is tracking below average, about a week late (2<sup>nd</sup> latest run on record) and to be a poor run. Some opportunity for First Nation harvest with citizens being cautioned to fish conservatively. US Management plans to implement a full subsistence fishing closure in the US portion of the mainstem Porcupine effective 12:00 noon, Wednesday, Oct 3.

**Northwest BC Transboundary Rivers**

**Stikine:** No further commercial/FSC/rec fisheries

**Taku:** Some rec fishing remaining for Coho

**Alsek:** Coho returns are good. There will be rec fishing over the next month.

Rebecca Reid

Regional Director General/ Directrice générale régionale

Fisheries and Oceans Canada - Pacific Region/ Pêches et Océans Canada - Région du Pacifique

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s.16(2)(c)

**Pages 150 to / à 167  
are withheld pursuant to sections  
sont retenues en vertu des articles**

**69(1)(g) re: (d), 69(1)(g) re: (e)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

**Longtin, Jean**

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**From:** Fogliato, Cara on behalf of Reid, Rebecca  
**Sent:** Thursday, November 1, 2018 11:53 AM  
**To:** Blewett, Catherine; Stringer, Kevin; Lapointe, Sylvie; Morel, Philippe  
**Cc:** Kahn, Zoe; Robinson, Connor; Patrick, Lindsey; Richter, Julie  
**Subject:** Pacific Region Operational Issues - Week of October 22, 2018

*On behalf of Rebecca Reid*

Hello,

Please see below the Pacific Region Operational Issues for the week of Oct. 22<sup>nd</sup>.

**Update: Species at Risk Act S.11 Conservation Agreement**

As a key component of its affidavit in response to the Southern Resident Killer Whale (SRKW) Emergency Order Judicial Review, Transport Canada (TC) is seeking to develop agreements with the shipping and transport sector to demonstrate commitments to acoustic and physical disturbance. In the last two weeks, TC has pursued the development of several agreements, including one with the Port of Vancouver (the Port) and several Enhancing Cetacean Habitat and Observation Program (ECHO) member groups, with expected completion of the agreements to be late October. However, DFO has only recently been involved in these discussions. The Port maintains it will only sign a *Species at Risk Act* (SARA) S.11 agreement; therefore, DFO must participate as only a competent minister may sign the SARA S.11 agreement. TC has developed a proposed draft agreement, which has been reviewed in-person between the parties and DFO (Thursday, Oct 11). With some additional content from the Species At Risk (SAR) Program, the current draft agreement will be suitable for a SARA S.11 agreement. As the agreement would span 5 years, the Port must seek approval from its Board – the next meeting is December. In the interim the Port and other parties have indicated to TC they would be willing to sign a letter of Intent (LOI) indicating intent to sign the agreement with Deputies from TC and DFO.

**Nuu-chah-nuth Tribal Council and Haida Nation Seek Bilateral and Multilateral Memorandums of Understanding in Support of Future Collaborative Management of the Proposed Offshore Pacific Marine Protected Area**

Nuu-chah-nulth Tribal Council (NTC) and Haida Nation's recent expression of interest in entering Memorandums of Understanding (MOU) in support of collaborative management of the proposed Offshore Pacific Marine Protected Area (MPA) have impact on the timing for Canada's ability to deliver on conserving 10% of Canada's marine and coastal areas by 2020. The Offshore Pacific MPA is part of Canada's national strategy to meet the 2020 marine conservation target, potentially contributing up to 140,000 km<sup>2</sup> towards the target. On October 24th, DFO received written correspondence from Nuuchah-nulth Tribal Council (NTC) and Haida Nation confirming their interest to work together with DFO in three key areas: i) developing shared governance arrangements for the management of the soon to be established MPA; ii) collaborative development of the MPA regulations; and iii) need for capacity building support. DFO staff have not acknowledged the NTC or Haida claim to the offshore area of interest; however, the department has engaged in the spirit of collaboration and reconciliation. A meeting with both groups has been set for November 7th.

**Meeting with Musqueam on Sponge Reef Protection**

DFO staff met with the Musqueam on Friday, Oct 26<sup>th</sup> to discuss proposed protection of nine glass sponge reefs in Howe Sound. The Musqueam have raised concerns about the ecological significance of these reefs and concerns that new closures to protect these additional nine sponge reefs will impact food, social and ceremonial (FSC) access as well as

their prawn commercial access. The Musqueam have access to the whole coast under the commercial prawn licence. [REDACTED]

[REDACTED] The Musqueam may contact senior departmental officials to reiterate their concerns or their interest in co-management arrangements for activities in their area.

**Update: Emergency RPA for the Chilcotin River and Thompson River Steelhead Trout DU's CSAS Science Advisory Report to be Published this Week**

A DFO Canadian Science Advisory Secretariat (CSAS) Pacific Region Peer review for the Emergency Recovery Potential Assessment for Chilcotin River and Thompson River Steelhead Trout Designatable Units (DU) was conducted September 20-21, 2018. The estimated decline of Steelhead Trout spawning fish over the last three generations has been 79% for the Thompson DU (177 adults returned to spawn in 2018), and 81% for the Chilcotin DU (58 adults returned in 2018). Distribution and recovery targets were identified. Threats and limiting factors identified to be most relevant to the survival and recovery of Steelhead Trout include changes in the marine environment, exploitation rate, degradation of freshwater and marine habitats, predation, and competition. Based on simulation results, increases in future abundances of both DU's are conditional on improvements in natural productivity. Reducing exploitation rates has some potential to lessen rates of decline under 'optimistic' productivity scenarios for the Thompson DU, and has the potential to provide some increase under the current productivity scenario for the Chilcotin DU. Uncertainties identified as having the potential to affect the estimated productivity of each population included exploitation rate and escapement estimates, and unaccounted for fixed rate terminal harvest. Given the very low numbers and decreasing trends in escapement for both the Thompson and Chilcotin river Steelhead populations, further harm will inhibit or delay recovery. [REDACTED]

s.69(1)(g) re: (e)

**State of the Salmon: Informing the Survival of Fraser Sockeye Returning in 2018 Through Life-cycle Observations**

Pre-season forecasts for most Fraser Sockeye stocks indicated 2018 returns were expected to fall below the median forecast distributions owing to poor survival. These forecasts were informed by life-cycle observations integrated across Science by the State of the Salmon Program and are published here: <http://waves-vagues.dfo-mpo.gc.ca/Library/4072511x.pdf>. The most striking observations in recent years have been the extremely warm conditions in both freshwater and marine ecosystems, which means some brood years of Fraser Sockeye have been exposed to higher than normal temperatures throughout their life cycle, leading to lower survival. Science advice for the past two years is that Fraser Sockeye returns would likely fall below the median forecasts, which indicates below average survival, and these forecasts have been validated by observed returns. This integration of research and monitoring program to understand survival of Sockeye Salmon provides more accurate return forecasting abilities, which has direct implications to the fisheries management system. Pacific salmon ecosystems are projected to continue to warm, and therefore, these results are critical to helping us understand how our salmon stocks will respond and to ensure our management systems are adaptive. This work is planned to continue, and will be extended to other Areas and species as Science work plans and budgets allow.

**Sea Surface Temperature and the Drought in Northwestern British Columbia Coast**

Drought in northwestern British Columbia and elevated sea surface temperatures (SST) observed recently in the northeast Pacific Ocean are both related to atmospheric conditions which have prevented fall storms from reaching British Columbia and Alaska. The drought has resulted in very low water levels in the Skeena, Nass and Stikine Rivers, which potentially impacts salmon spawning and overwinter survival of developing embryos. The warmer surface conditions are superficially similar to the warm ocean conditions that prevailed from 2014-16 (the 'Blob'), which is implicated in many events along the west coast such as warmer conditions on land, poorer feeding conditions for salmon, and sea bird and sea lion deaths. However, data from the September Line P survey and the Argo Float Program show that the current warm SST anomalies are confined to the upper 30 m of the ocean, in contrast to the Blob which penetrated much deeper into the water column and consequently persisted for several years. The very strong fall storm

predicted to hit the north coast this week may reduce the temperatures through mixing and cooling. The atmospheric conditions that are causing the drought and surface warming in the northeast Pacific, called a blocking high, have been prevalent off California for the last decade or so leading to drought or near-drought conditions. The occurrence of the Blob in 2014-2016 and the warm event this year suggests that long-lasting blocking highs are becoming part of our climate conditions and should be expected to occur in the future. How often they will occur is not known at this time. We will continue to monitor the upper ocean conditions using the data from the Argo Float program.

No information has been removed or severed from this page

## Hirani, Samia

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**From:** Hirani, Samia  
**Sent:** Monday, November 19, 2018 11:58 AM  
**To:** Northcott, Jennifer  
**Cc:** McGill, Stephanie; Hodgins, Jill; Ryan, Sandra-Lee; Longtin, Jean  
**Subject:** RE: Steelhead Min Briefing on Nov 19 5pm  
**Attachments:** Nov 9 - Approved by Associate.pdf;



Here you go.

**From:** Northcott, Jennifer  
**Sent:** Monday, November 19, 2018 9:19 AM  
**To:** Hirani, Samia <Samia.Hirani@dfo-mpo.gc.ca>  
**Cc:** McGill, Stephanie <Stephanie.McGill@dfo-mpo.gc.ca>; Hodgins, Jill <Jill.Hodgins@dfo-mpo.gc.ca>  
**Subject:** FW: Steelhead Min Briefing on Nov 19 5pm

Hi Samia:

Can we please have the package for today's steelhead briefing? We have multiple versions and we want to make sure that we are going off the right one. We can come up to get it. Let us know.

Thanks,  
Jennifer

**From:** McGill, Stephanie  
**Sent:** November-16-18 2:38 PM  
**To:** McPherson, Arran  
**Cc:** Hodgins, Jill; Northcott, Jennifer; Moore, Wayne  
**Subject:** Steelhead Min Briefing on Nov 19 5pm

Fyi

Date: November 19, 2018  
Time: 5:00pm-5:30pm EST  
Location: **Centre Block** in room 107-S

**Agenda : Steelhead**

Participants: Deputy Minister, Associate, Philippe Morel (lead), Arran McPherson (lead), Nicholas Winfield, Zoe Kahn, Ashley Butcher

Documents: no additional documents required

**From:** Hirani, Samia  
**Sent:** November-16-18 2:34 PM

s.69(1)(g) re: (a)

**To:** Ministerial Briefing / Breffage ministériel (DFO/MPO); Turple, Justin; Hampel, Sarah; Belle-Isle, Alain; Mongrain, Johanne; Mackenzie, Joey; Hill, Johanna; Richter, Julie; Villeneuve, Anne-Marie; Patrick, Lindsey; Lamirande, Robert; McGill, Stephanie

**Cc:** Kahn, Zoe; Robinson, Connor; Jarjour, Jasmine; Barker, Tyler; Butcher, Ashley; Hirani, Samia

**Subject:** Min briefing-November 19

Hello

We have just received confirmation of a Ministerial briefing for Monday November 19, 2018 from 4:00pm-5:30pm EST. The briefing will be at Centre Block in room 107-S. If there are any changes we will let you know.

Date: November 19, 2018

Time: 4:00pm-4:30pm EST

Location: Centre Block in room 107-S

**Agenda : Sustainable Blue Economy Conference- GAC presentation**

Participants: Deputy Minister, Associate, Laurie-Anne Kempton (lead), Tom Oommen, Renée Sauvé, Zoe Kahn, Ashley Butcher

Documents: no documents

Date: November 19, 2018

Time: 4:30pm-5:00pm EST

Location: Centre Block in room 107-S

**Agenda : Supplementary Estimates A**

Participants: Deputy Minister, Associate, Jen O'Donoghue (co-lead), Commissioner, Tom Oommen, Philippe Morel, Sylvie Lapointe, Robert Lamirande, Zoe Kahn, Ashley Butcher

Documents: no documents

Date: November 19, 2018

Time: 5:00pm-5:30pm EST

Location: Centre Block in room 107-S

**Agenda : Steelhead**

Participants: Deputy Minister, Associate, Philippe Morel (lead), Arran McPherson (lead), Nicholas Winfield, Zoe Kahn, Ashley Butcher

Documents: no additional documents required

***Samia Hirani***

Senior Analyst // Analyste principale

Office of the Deputy Minister // Bureau de la Sous-ministre

Fisheries and Oceans Canada // Pêches et océans Canada

T: 613-949-3400 \*\*\*NEW\*\*\*

BB: [REDACTED]

[samia.hirani@dfo-mpo.gc.ca](mailto:samia.hirani@dfo-mpo.gc.ca)

s.16(2)(c)



**Pages 173 to / à 232**  
**are withheld pursuant to sections**  
**sont retenues en vertu des articles**

**69(1)(g) re: (d), 69(1)(g) re: (e)**

**of the Access to Information Act**  
**de la Loi sur l'accès à l'information**



Fisheries and Oceans  
Canada  
Aquatic Ecosystems  
Assistant Deputy Minister

Pêches et Océans  
Canada  
Écosystèmes aquatique  
Sous-ministre adjoint

UNCLASSIFIED

2018-AE-00688

EKME #: 3983499

MEMORANDUM FOR THE DEPUTY MINISTER

**Letter to the Province of British Columbia on the Emergency Listing of Steelhead Trout  
under the Species at Risk Act  
(For Signature)**

**SUMMARY OF ADVICE TO DEPUTY MINISTER**

This memo is requesting your signature on a letter seeking the position of the Province of British Columbia with respect to the emergency listing of Steelhead Trout (Thompson River) and Steelhead Trout (Chilcotin River) (**Tab 1**).

These species have been assessed on an emergency basis by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as endangered. Should the Minister of Environment and Climate Change determine that these populations are facing imminent threat to survival, she must recommend to the Governor in Council (GiC) they be added as endangered to the *List of Wildlife Species at Risk* (Schedule 1) under the *Species at Risk Act* (SARA). The GiC will make the final decision on listing.

To support the GiC in making their listing decision, should it be required, Fisheries and Oceans Canada (DFO) is conducting consultations with Indigenous groups and other key stakeholders. Typical listing consultation processes under SARA include consultations with provinces through Deputy Minister to Deputy Minister letters.

It is recommended that you sign the attached letter as soon as possible, so that it can be delivered to the province of British Columbia to seek their position on a possible listing of the Steelhead populations in a timely manner. A response from the Province of British Columbia is requested by January 18, 2019.

**BACKGROUND**

On December 7, 2017, the Minister of Environment and Climate Change was notified that the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) would engage in an emergency assessment of Steelhead Trout (Thompson and Chilcotin populations) under the *Species at Risk Act* (SARA) subsections 28(1) and 28(2). COSEWIC considered biological information on threats to the survival of the species, and what appears to be a dramatic decline in the number of mature fish returning to spawn. The emergency assessment, which was published on February 13, 2018, classified both populations as endangered.

If the Minister of Environment and Climate Change is of the opinion that there is an imminent threat to the survival of these populations, the Minister must, after consultation with the Minister of Fisheries and Oceans, make a recommendation to the Governor in Council (GiC) that the *List of Wildlife Species at Risk* set out in Schedule 1 to SARA be amended to include these populations as endangered. Following such a recommendation, the GiC would make a

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listing decision based on information provided by the Minister, and may consider additional information, such as socio-economic impacts and the results of consultations.

In developing a listing recommendation package for a species assessed by COSEWIC that is eligible for addition to Schedule 1 of SARA, it is required that the provinces and/or territories in which that species occurs are consulted. For aquatic species, this level of consultation occurs directly between Fisheries and Oceans Canada and the provincial and/or territorial governments through Deputy Minister Letters. While this is not a requirement for an emergency listing process, the view of the Province of British Columbia would likely be a relevant consideration for the GiC when making their listing decision.

A letter seeking the position of the Province of British Columbia with respect to the potential listing of Steelhead Trout (Thompson River) and Steelhead Trout (Chilcotin River) has been prepared and is attached (**Tab 1**) for your signature. Public consultations on these two populations of Steelhead Trout concluded on December 3, 2018.

### **STRATEGIC CONSIDERATIONS**

Letters seeking provincial and/or territorial government-wide positions on SARA listing recommendations have been sent to provinces and territories for previous aquatic species being considered for listing. Jurisdictions have expressed their appreciation that the federal government has sought their positions and expect similar opportunities for all aquatic species under consideration.

While the Minister of Environment and Climate Change can only base her opinion on imminent threat on the biological needs of the species and, if found, must recommend that the GiC add the species to Schedule 1 as endangered, feedback received during the consultation process for Steelhead Trout will be provided to the GiC for their consideration in making a listing decision.

The Province of British Columbia is already very engaged on the potential emergency listing of Steelhead. Provincial biologists participated in the Emergency Assessments conducted by COSEWIC and in the recent Recovery Potential Assessment conducted by DFO. The Province conducts stock assessments for Steelhead and administers the recreational freshwater sport fishery under delegated authority from the Government of Canada.

### **INTERDEPARTMENTAL CONSULTATIONS**

No interdepartmental consultations were undertaken in the development of this memorandum.

### **EXTERNAL CONSULTATIONS**

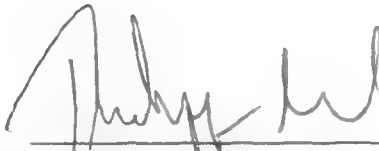
No external consultations were undertaken in the development of this memorandum.

.../3

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**ADVICE AND RECOMMENDATIONS TO DEPUTY MINISTER**

It is recommended that you sign the attached letter to the Province of British Columbia's Deputy Ministers who have interest in the species currently under consideration. A response from the Province is requested by January 18, 2019.



DEC 06 2018

Philippe Morel  
Assistant Deputy Minister  
Aquatic Ecosystems

Attachment: (1):

- 1) Tab 1 - Letter to the Province of British Columbia for signature



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Deputy Minister

Sous-ministre

DEC 07 2018

Mr. Mark Zacharias  
Deputy Minister of Environment  
Ministry of Environment and Climate Change Strategy  
PO Box 9339 Stn Prov Govt  
Victoria, BC  
V8W 9M1

Ms. Bobbi Plecas  
Deputy Minister of Climate Change  
Ministry of Environment and Climate Change Strategy  
PO Box 9339 Stn Prov Govt  
Victoria, BC  
V8W 9M1

Dear Mr. Zacharias and Ms. Plecas:

I am writing to you to seek the position of your government with respect to potentially listing two aquatic species on Schedule I of the *Species at Risk Act* (SARA).

These species were assessed on an emergency basis by the Committee on the Status of Endangered Wildlife in Canada and found to be at risk:

- Steelhead Trout (Thompson River) as endangered (2018); and
- Steelhead Trout (Chilcotin River) as endangered (2018).

Following an emergency assessment, the Minister of Environment and Climate Change must form an opinion on whether imminent threat to survival exists. If the Minister is of the opinion there is an imminent threat to one or both populations of Steelhead Trout, she must recommend to Governor in Council (GiC) that the population(s) be listed on an emergency basis. Following such a recommendation, GiC would make a listing decision based on information provided by the Minister, and may consider additional information, such as socio-economic impacts and the results of consultations.

In the event that imminent threat exists, I am requesting that you provide a government-wide position on listing for each Steelhead population by January 18, 2019 to ensure that British Columbia's views can be taken into account by GiC in making a decision on whether or not these species should be added to Schedule I of SARA.

Canada

.../2

Detailed information on these species and the listing process under SARA can be found on the Species at Risk Public Registry (<http://www.sararegistry.gc.ca/>). As well, please contact Rebecca Reid, Regional Director General (Pacific Region) at the following address if you wish to obtain further information: Rebecca Reid, Regional Director General, Fisheries and Oceans Canada, 401 Burrard Street, Suite 200, Vancouver, British Columbia, V6C 3S4, Telephone: 604-666-6098.

Thank you for the Province of British Columbia's continued cooperation as we implement SARA. I look forward to hearing from you on this matter.

Yours sincerely,



Catherine Blewett

cc: [SARA.XPAC@dfo-mpo.gc.ca](mailto:SARA.XPAC@dfo-mpo.gc.ca)  
Rebecca Reid, Regional Director General, Pacific Region, Fisheries and Oceans  
Canada  
Philippe Morel, Assistant Deputy Minister, Aquatic Ecosystems, Fisheries and  
Oceans Canada  
Alec Dale, Executive Director, Ecosystems Branch, Ministry of Environment and  
Climate Change Strategy



Government of Canada  
Fisheries and Oceans

Gouvernement du Canada  
Pêches et Océans

UNCLASSIFIED  
2018-AE-00688  
EKME 3983409

To: Catherine Blowett  
Pour:

Date:

Subject: Letter to the Province of British Columbia on the Emergency listing  
Objet: of Steelhead Trout under the Species at Risk Act

From: Nicholas Winfield, DG, Ecosystems Management  
De:

Via: Philippe Morel, ADM, Aquatic Ecosystems

Additional approvals:  
Autre(s) approbation(s):

Rebecca Reid, RDG,  
Pacific Region:

NOV 23 2018  
NOV 23 2018  
NOV 27 2018

☐ Material for the Minister  
Documents pour le Ministre

☒ Your Signature  
Votre signature

☐ Information

Remarks: This briefing note was developed in consultation with the following  
Remarques: regions/sectors: Pacific Region

Distribution: RDG Pacific Region

  
Bridgid Payne  
A/Regional Director, Ecosystems Management Branch

NOV 27 2018

Drafting Officer/  
Rédacteur:

J. Young (613-203-4045) / C. Busby / J. Stewart / 11



Government of Canada  
Fisheries and Oceans

Gouvernement du Canada  
Pêches et Océans

Received in DMO

Received in DMO

DEC 06 2018

12-45

NOV 29 2018

10:30

UNCLASSIFIED

2018-AE-00688

EKME 3983499

To: Catherine Blewett  
Pour:

Date:

Subject: Letter to the Province of British Columbia on the Emergency listing  
Objet: of Steelhead Trout under the Species at Risk Act

From: Nicholas Winfield, DG, Ecosystems Management  
De:

*Archer* NOV 23 2018

*JS* NOV 23 2018

Via: Philippe Morel, ADM, Aquatic Ecosystems

*see memo.*

NOV 28 2018

Additional approvals:

Autre(s) approbation(s):

Rebecca Reid, RDG,

Pacific Region: *see attached.*



Material for the Minister  
Documents pour le Ministre



Your Signature  
Votre signature



Information

Remarks: This briefing note was developed in consultation with the following  
Remarques: regions/sectors: Pacific Region

Distribution: RDG Pacific Region

Drafting Officer/  
Rédacteur:

*JS*  
J. Young (613-203-4045) / C. Busby / J. Stewart / II



29/11/18  
10:04 AM

Docket # : 2018-AE-00688  
Xref # :  
Date Created : 2/11/18

## HISTORY REPORT

Lead : NCR\_AE\_EM\_SAR  
ILO : NCR\_DM  
ILO Due :  
Subject : Letter to the Province of British Columbia on the emergency listing of Steelhead Trout under the Species at Risk Act

### Instructions:

Assigned By	Assigned To	Task	Assign Date	Deadline	Completed date
AE	NCR_AE_EM_SAR	APP	2/11/18		21/11/18
AE	NCR_AE_EM	APP	2/11/18	23/11/18	
AE	NCR_AE_ADMO	APP	23/11/18	23/11/18	
<u>Comments:</u>					
- In ADMO DaspeC 23/11/18 2:14 PM					
AE	NCR_AE_EM	REVISE	23/11/18	26/11/18	
<u>Note:</u> Hardcopy in your inbox for pickup. BF = SD					
006	NCR_AE_EM_SAR	REVISE	26/11/18	26/11/18	
AE	NCR_AE_EM	APP	26/11/18	26/11/18	
006	NCR_AE_ADMO	APP	26/11/18	28/11/18	
<u>Comments:</u>					
- in ADMO DaspeC 26/11/18 3:24 PM					
AE	PAC_RDG	APP	26/11/18	11/27/2018	28/11/18
<u>Note:</u> Scan sent for approval					
<u>Comments:</u>					
- Received in RDGO Nov 26; Sent to EMB for Regional Director review before RDG reviews. -Submitted for RDG review and approval - Nov 27, 2018 CHURCHA 27/11/18 4:53 PM					
- Approved by Rebecca Reid, RDG, Pacific Region. Uploaded into GCCMS and emailed to AE CHURCHA 28/11/18 11:54 AM					
AE	NCR_DM	APP	29/11/18		
<u>Note:</u> Docket will be hand delivered shortly.					

### Attachments

Tab 1 DM Listing Letter 2018 BC Steelhead clean.DOCX

NOV 29 2018  
DEC 06 2018  
*Tasmine 12:00*  
*Returned for revisions (CO)*

6/12/18  
12:25 PM

Docket # : 2018-AE-00688  
Xref # :  
Date Created : 2/11/18

## HISTORY REPORT

Lead : NCR\_AE\_EM\_SAR  
ILO : NCR\_DM  
ILO Due :  
Subject : Letter to the Province of British Columbia on the emergency listing of Steelhead Trout under the Species at Risk Act

Instructions:

Assigned By	Assigned To	Task	Assign Date	Deadline	Completed date
AE	NCR_AE_EM_SAR	APP	2/11/18		21/11/18
AE NCR_AE_EM	APP		2/11/18	23/11/18	
AE NCR_AE_ADMO	APP		23/11/18	23/11/18	
<u>Comments:</u>					
- In ADMO DaspeC 23/11/18 2:14 PM					
AE NCR_AE_EM	REVISE		23/11/18	26/11/18	
<u>Note:</u> Hardcopy in your inbox for pickup. BF = SD					
006 NCR_AE_EM_SAR	REVISE		26/11/18	26/11/18	
AE NCR_AE_EM	APP		26/11/18	26/11/18	
006 NCR_AE_ADMO	APP		26/11/18	28/11/18	
<u>Comments:</u>					
- in ADMO DaspeC 26/11/18 3:24 PM					
AE PAC_RDG	APP		26/11/18	11/27/2018	28/11/18
<u>Note:</u> Scan sent for approval					
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- Approved by Rebecca Reid, RDG, Pacific Region. Uploaded into GCCMS and emailed to AE CHURCHA 28/11/18 11:54 AM					
AE NCR_DM	APP		29/11/18	6/12/18	
<u>Note:</u> Docket will be hand delivered shortly.					
<u>Comments:</u>					
- Received McdermidJa 29/11/18 10:36 AM					
009 NCR_AE_ADMO	REVISE		6/12/18	6/12/18	

DEC 06 2018

To ~~John~~ Connor

**Gerick, Alyssa**

---

**From:** Kenyon, Robyn  
**Sent:** December-10-18 2:00 PM  
**To:** Hall, Peter; Gerick, Alyssa; Leslie, Karen  
**Subject:** FW: Mino Brief Indigenous STEELHEAD input

FYI

**From:** Kenyon, Robyn  
**Sent:** Monday, December 10, 2018 12:58 PM  
**To:** Kotyk, Mel <Mel.Kotykh@dfo-mpo.gc.ca>  
**Cc:** Thomson, Andrew <Andrew.Thomson@dfo-mpo.gc.ca>; Barton, Meagan <Meagan.Barton@dfo-mpo.gc.ca>; Johal, Rauvyn <Rauvyn.Johal@dfo-mpo.gc.ca>; Didluck, David <David.Didluck@dfo-mpo.gc.ca>; Grout, Jeff <Jeff.Grout@dfo-mpo.gc.ca>; Davis, Neil <Neil.Davis@dfo-mpo.gc.ca>  
**Subject:** RE: Mino Brief Indigenous STEELHEAD input

Thanks Mel,

Below are a couple of bullets related to the Steelhead request.

Thank you,  
Robyn

-requests from inland Nations to meet Minister about Steelhead - do we have any

- We received a request from the Tsilhqot'in National Government (TNG) to meet with the Minister through the course of the Thompson and Chilcotin Steelhead *Species at Risk Act* (SARA) emergency listing consultations (Oct. 1-Dec.2, 2018). TNG requested a discussion regarding a high-level framework for engagement on Steelhead (letter sent to Ministers Wilkinson and McKenna Nov. 30, 2018).
- We heard from other First Nations (Lower Fraser River and Vancouver Island/Sunshine Coast nations) a general interest in meeting with DFO to discuss collaboration to protect Steelhead and other co-occurring species.

**From:** Kotyk, Mel <Mel.Kotykh@dfo-mpo.gc.ca>  
**Sent:** Monday, December 10, 2018 11:02 AM  
**To:** Kenyon, Robyn <Robyn.Kenyon@dfo-mpo.gc.ca>  
**Cc:** Thomson, Andrew <Andrew.Thomson@dfo-mpo.gc.ca>; Barton, Meagan <Meagan.Barton@dfo-mpo.gc.ca>; Johal, Rauvyn <Rauvyn.Johal@dfo-mpo.gc.ca>; Didluck, David <David.Didluck@dfo-mpo.gc.ca>; Grout, Jeff <Jeff.Grout@dfo-mpo.gc.ca>; Davis, Neil <Neil.Davis@dfo-mpo.gc.ca>  
**Subject:** RE: Mino Brief Indigenous

Thanks.

Robyn – this is due later today as the briefing with MINO is tomorrow.

Here are my few bullets, and others can add to this email chain and, when completed, it can then go back to NHQ.

-requests from inland Nations to meet Minister about Steelhead - do we have any

-stock management- Nations to create their own laws to restrict access to waters

- Through self-determination and delegated law making authority First Nations can create their own laws to govern their own members which may include restricting their members access to waters (however I am unaware of any known examples for this to exist).
- First Nations cannot make laws to restrict non-members access to waters that are governed by a province or the federal government. It is in extremely rare circumstances that waters are not governed by a province or federal government therefore the risk is extremely low and only in circumstances as outlined below.
- Within a Self-Government agreement, the First Nation can make laws to restrict non-members to waters that are wholly contained within their territory (i.e. a lake or a stream that starts and stops within their territory), but waters that flow through a First Nation territory are excluded.

3) SGIG- we need a better sense of what the collaborative approach to a Fisheries Framework could look like. I've heard word of 2020 as a target for this component. I have a feeling they won't be a lot to brief up on for this one yet but an overview of where the fisheries access/management for self-governments stands now would be helpful.

- The management of fisheries, even within a self-government agreement, remains the responsibility of the Minister.
- During the negotiations of a Treaty, Reconciliation Agreement, or a Self-Government Agreement, there are clear references to the Ministers authority remaining unfettered.
- However Canada has chosen in the past to enter into bilateral processes, such as a Joint Fisheries Management Committee, which fisheries issues pertaining to the First Nations right are discussed, and if consensus is reached, a decision on how First Nations right for fisheries will be managed.
- Issues that impact other First Nations, other stakeholders, or are broader in nature and scope are referred to the appropriate Regional process for consultation and advice which then go to the Minister for decision.

**From:** Davis, Neil

**Sent:** December-10-18 10:25 AM

**To:** Kotyk, Mel

**Cc:** Thomson, Andrew; Barton, Meagan; Johal, Rauvyn; Didluck, David; Kenyon, Robyn; Grout, Jeff

**Subject:** RE: Mino Brief Indigenous

s.21(1)(a)

s.21(1)(b)

Hi Mel,

Steelhead is in Jennifer's group. Jennifer is away and Jeff G is acting, but I believe Robyn Kenyon, as the SARA Salmon Team lead, may be best placed to respond. I've cc'd them here to respond to you

Neil

**From:** Kotyk, Mel <Mel.Kotyk@dfo-mpo.gc.ca>

**Sent:** Monday, December 10, 2018 10:22 AM

**To:** Davis, Neil <Neil.Davis@dfo-mpo.gc.ca>

**Cc:** Thomson, Andrew <Andrew.Thomson@dfo-mpo.gc.ca>; Barton, Meagan <Meagan.Barton@dfo-mpo.gc.ca>; Johal, Rauvyn <Rauvyn.Johal@dfo-mpo.gc.ca>; Didluck, David <David.Didluck@dfo-mpo.gc.ca>

**Subject:** FW: Mino Brief Indigenous

Hi Neil – here is what I received. Can you please ask for input on the steelhead piece in the green section below? I will write a bullet or two on the 2)c), and I now know that item 3) is about Self Government agreements, which I can forward a comment on.

Thanks

**From:** Mousseau, Pauline  
**Sent:** December-10-18 8:55 AM  
**To:** Kotyk, Mel  
**Cc:** Buie, Jennifer  
**Subject:** FW: Mino Brief Indigenous

Hi Mel can you take a look at the request below and let me know if you can tackle the portion highlighted in green?

For MINO briefing tomorrow afternoon.

Thanks!!

**From:** Buie, Jennifer <[Jennifer.Buie@dfo-mpo.gc.ca](mailto:Jennifer.Buie@dfo-mpo.gc.ca)>  
**Sent:** Monday, December 10, 2018 11:53 AM  
**To:** Mousseau, Pauline <[Pauline.Mousseau@dfo-mpo.gc.ca](mailto:Pauline.Mousseau@dfo-mpo.gc.ca)>  
**Cc:** Ater, Atong <[Atong.Ater@dfo-mpo.gc.ca](mailto:Atong.Ater@dfo-mpo.gc.ca)>; Ball, Angel <[Angel.Ball@dfo-mpo.gc.ca](mailto:Angel.Ball@dfo-mpo.gc.ca)>; Chamberlain, Karen <[Karen.Chamberlain@dfo-mpo.gc.ca](mailto:Karen.Chamberlain@dfo-mpo.gc.ca)>; Rabbath, Carla <[Carla.Rabbath@dfo-mpo.gc.ca](mailto:Carla.Rabbath@dfo-mpo.gc.ca)>  
**Subject:** RE: Mino Brief Indigenous

Pauline,  
We can tackle 2 a), but the stuff highlighted in green should go to the Pac region (I think). What does SGIG stand for?

**From:** Mousseau, Pauline <[Pauline.Mousseau@dfo-mpo.gc.ca](mailto:Pauline.Mousseau@dfo-mpo.gc.ca)>  
**Sent:** Monday, December 10, 2018 10:15 AM  
**To:** Buie, Jennifer <[Jennifer.Buie@dfo-mpo.gc.ca](mailto:Jennifer.Buie@dfo-mpo.gc.ca)>  
**Cc:** Ater, Atong <[Atong.Ater@dfo-mpo.gc.ca](mailto:Atong.Ater@dfo-mpo.gc.ca)>; Ball, Angel <[Angel.Ball@dfo-mpo.gc.ca](mailto:Angel.Ball@dfo-mpo.gc.ca)>; Chamberlain, Karen <[Karen.Chamberlain@dfo-mpo.gc.ca](mailto:Karen.Chamberlain@dfo-mpo.gc.ca)>  
**Subject:** FW: Mino Brief Indigenous

Hi Jennifer,

For items 2 and 3:

Not sure who else went to the AFN mtgs last week but we will need some material to present for tomorrow's MINO mtg. Also not 100% sure which other areas could provide information on this item.

Should have something on this for Rob to review by EOD.

**From:** Hampel, Sarah <[Sarah.Hampel@dfo-mpo.gc.ca](mailto:Sarah.Hampel@dfo-mpo.gc.ca)>  
**Sent:** Monday, December 10, 2018 10:06 AM  
**To:** Lamirande, Robert <[Robert.Lamirande@dfo-mpo.gc.ca](mailto:Robert.Lamirande@dfo-mpo.gc.ca)>; Anderson, Kevin <[Kevin.Anderson@dfo-mpo.gc.ca](mailto:Kevin.Anderson@dfo-mpo.gc.ca)>  
**Cc:** Mousseau, Pauline <[Pauline.Mousseau@dfo-mpo.gc.ca](mailto:Pauline.Mousseau@dfo-mpo.gc.ca)>; Turple, Justin <[Justin.Turple@dfo-mpo.gc.ca](mailto:Justin.Turple@dfo-mpo.gc.ca)>  
**Subject:** FW: Mino Brief Indigenous

Rob, Kevin,

Please see MINO's suggested topics for the Indigenous brief tomorrow.

Let me know if there is anything you'd like added and who will speak to which item. Pacific is already looped in.

Sarah

**From:** Barker, Tyler <[Tyler.Barker@dfo-mpo.gc.ca](mailto:Tyler.Barker@dfo-mpo.gc.ca)>  
**Sent:** Monday, December 10, 2018 9:53 AM  
**To:** Hampel, Sarah <[Sarah.Hampel@dfo-mpo.gc.ca](mailto:Sarah.Hampel@dfo-mpo.gc.ca)>; Kaba, Kyle <[Kyle.Kaba@dfo-mpo.gc.ca](mailto:Kyle.Kaba@dfo-mpo.gc.ca)>

Cc: Turple, Justin <Justin.Turple@dfo-mpo.gc.ca>; Belle-Isle, Alain <Alain.Belle-Isle@dfo-mpo.gc.ca>; Hirani, Samia  
<Samia.Hirani@dfo-mpo.gc.ca>; Jarjour, Jasmine <Jasmine.Jarjour@dfo-mpo.gc.ca>; Barker, Tyler  
<Tyler.Barker@dfo-mpo.gc.ca>

Subject: Mino Brief Indigenous

Hi Sarah, Meagan (for Kyle),

Here's the proposed agenda from mino for tomorrow's meeting:

s.69(1)(g) re: (a)

- 1) CFN -Overview [redacted] Meagan: please identify who from PAC region should be on the call for this.
- 2) AFN Special Chiefs Assembly debrief , follow up on issues raised in dialogue session (I was there but couldn't catch everything)

-impacts of resolutions passed

requests from inland Nations to meet Minister about Steelhead - do we have any

stock management Nations to create their own laws to restrict access to water

3) "SGIG" we need a better sense of what the collaborative approach to a Fisheries Framework could look like. We heard word of 2020 as a target for this component. I have a feeling their won't be a lot to brief up on for this one. WI  
but an overview of where the fisheries access/management for self-government stands now would be helpful

- 4) any other fast approaching or January issues the dept deems worth raising

Can you advise if you have anything else to add?

Since Tom will be in EET presenting MTP stuff, safe to assume Rob/Kevin will lead the discussion?

Thanks,  
Tyler

Best available copy

s.21(1)(a)

s.21(1)(b)

**Pages 246 to / à 256  
are withheld pursuant to sections  
sont retenues en vertu des articles**

**69(1)(g) re: (d), 69(1)(g) re: (e), 69(1)(g) re: (a)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Approved by SADM

Docket #: 2019-009-00075  
Security Classification: UNCLASSIFIED

## SCENARIO NOTE

### MEETING WITH BC MINISTER OF AGRICULTURE LANA POPHAM

#### Overview

Your overall objective for the meeting is to advance common goals to promote and sustainably manage Canada's fish and seafood sector, including aquaculture.

The key issues that will be raised during the meeting are the British Columbia Salmon Restoration and Innovation Fund (BCSRIF), and coordinating with the Province on Salmon and Steelhead.

#### 1. British Columbia Salmon Restoration and Innovation Fund (BCSRIF)

Briefly describe the issue that may be raised with the Minister

#### Minister's Objectives

Re-iterate DFO's support for innovation and productivity in the BC fish and seafood sector and re-assure your colleague that discussions will continue with the provincial government to roll-out the fund in a collaborative and timely manner.

#### Key Messages

##### • Suggested messages

#### 2. Coordinating with the Province on Salmon and Steelhead

Steelhead Trout (Thompson River population and Chilcotin River population) were assessed as Endangered in an Emergency Assessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). ~~A decision must be made by the Governor in Council on whether to list on an emergency basis these populations of Steelhead in Schedule 1 to of the Species at Risk Act (SARA). Listing If listed under SARA, this would trigger automatic prohibitions against killing, harming, harassing etc., and destroying their residences. It would also require the identification and protection of critical habitat.~~

s.21(1)(a)

s.21(1)(b)

Regardless of whether or not these Steelhead are listed, given the grave conservation concern associated with the status of Steelhead, and to act in response to public pressures for action, Fisheries and Oceans Canada and the Government of Canada should contemplate what further



Classification

measures it could take to mitigate threats impacting these Steelhead.

Since ~~As~~ Steelhead Trout are salmonids with a similar life history to the Pacific salmon species that share their habitat, threats that impact them similarly ~~act on and~~ impact salmon species. Actions addressing threats to Steelhead will also benefit Pacific salmon stocks with which they co-mingle, and vice versa.

~~In terms of management, the~~The Province of British Columbia has delegated responsibility for the management of ~~manages~~ freshwater recreational fisheries; for species other than salmon, including Steelhead, Rainbow Trout, char and other trout, as well as other species such as sturgeon under the *British Columbia Sport Fishing Regulations, 1996* established under the federal *Fisheries Act*.

The Province also has jurisdiction over activities that have direct and indirect effects on aquatic habitats in freshwater systems including the Fraser ~~system-River watershed~~ and the Thompson and Chilcotin regions. These regions include important cattle ranching areas, and have seen increases in agriculture (e.g. alfalfa); these activities require water extraction from the ~~Fraser River system~~Thompson and Chilcotin rivers, which contributes (along with ~~more global climate changes and loss of riparian vegetation~~) to higher temperatures in river systems than affect salmonid health. Forestry practices are also under the responsibility of British Columbia. Agricultural ~~practices~~ and forestry practices can contribute to siltation and other changes to the water in which salmonids reside and reproduce.

First Nations are dependent culturally, nutritionally and economically on salmonids in the Fraser River. ~~A majority of~~Many BC First Nations either fish the Steelhead or fish salmon~~are involved in fisheries for salmon that co-mingle with these Steelhead while some terminal Nations target Steelhead in their fisheries.~~ Any actions that may be adopted need to take into account this deep cultural relevance for First Nations all along the salmonid migratory routes.

The ~~P~~province has held the position and communicated both to the Department and publically that threats to Steelhead are primarily related to commercial and FSC salmon fishing, particularly Chum salmon fisheries, and interception of Steelhead in these fisheries. They maintain that interception in recreational fisheries, which require catch and release of Steelhead, does not result in significant harm or mortality.

Because of the shared responsibilities for Steelhead management and required actions to address threats to the Steelhead and ~~other Pacific salmon~~s and their habitat, it is important that federal and provincial authorities work together ~~and collaboratively to address issues.~~ The Steelhead file presents an opportunity to illustrate federal-provincial collaboration and to make significant advances in conservation of these iconic species.

Opportunities to improve habitat currently exist through the Coastal Restoration Fund; Habitat Stewardship Program; the BC Salmon Restoration and Innovation Fund; the Pacific Salmon Endowment Fund, ~~and soon, the Nature Legacy Fund.~~ Discussions on better and collaborative management of fisheries for the conservation of Steelhead should be undertaken.

Classification

### Minister's Objectives

the objective of this meeting is to identify shared goals, and opportunities for collaboration, between the federal and provincial governments on conservation of Steelhead Trout, Pacific salmon and other salmonids in the Fraser River system. The discussion should focus on Steelhead conservation for the immediate term but also include a strategy for all impacted salmonids in the longer term as more species have been assessed as being at risk by COSEWIC (Sockeye, Chinook), are impacted by the same threats (e.g., habitat loss) and will be also considered for listing under SARA in the coming years.

### Key Messages

- ~~The emergency assessment of Steelhead Thompson and Chilcotin Steelhead recently underwent emergency assessment by COSEWIC, highlighting -has increased conservation concerns for this species these stocks -that are shared by DFO, the Province of BC, Indigenous communities and the public.~~
- Regardless of a listing decision, the Thompson and Chilcotin populations of Steelhead Trout need protection from several key threats affecting their viability including fisheries, and habitat loss, and land and water use impacts. As co-managers of these fish and their habitats, DFO and the Province must work together to ensure their survival.
- We acknowledge that interception in commercial and FSC fisheries is an issue and are doing what we can to address this threat. In 2018 we took action to further reduce fisheries impacts and targeted measures, were established that allowed for 90% Steelhead escapement, including rolling window closures, were implemented. implemented an extended window closure period that is estimated to encompass 90% of the Thompson and Chilcotin Steelhead migration period, based on average run timing and migration speed. We also recognize that the Province too implemented additional fisheries closures on some parts of the Fraser recreational fisheries closures to also reduce incidental catch of the possibility of harming adult Steelhead. However, we feel more can and should be done by both jurisdictions.
- For the 2019 season we are consulting through the integrated fisheries management planning process on further fisheries management measures (broader or longer fisheries closures) that could be

Commented [dfo pac2]: This is statement needs revision.  
Media lines read

•The length of this closure period is estimated to encompass 90% of the Thompson and Chilcotin Steelhead run, based on average run timing and migration speed.

Classification

implemented.

- We would also like to discuss and build an approach for implementing actions that would improve habitat for Steelhead and all salmonids, building on existing programs such as the Coastal Restoration Fund and the BC Salmon Restoration and Innovation Fund.

s.14

s.21(1)(a)

s.21(1)(b)



Fisheries and Oceans Canada  
Correspondence Routing Slip

Fiche d'acheminement de correspondance  
Pêches et Océans Canada

CLASSIFICATION  
GCCMS #: 2019-009-00075  
EKME #: 4014925

To: Timothy Sargent Date:  
Pour:

Object: **MEETING WITH BC MINISTER OF AGRICULTURE LANA POPHAM**  
Objet:

From / Luke McKay, Director Intergovernmental Affairs  
De:

Via: Anne Lamar, S/ADM Strategic Policy

Additional approvals:  
Autre(s) approbation(s):



Material for the Minister  
Documents pour le Ministre



Your Signature  
Votre signature



Information

Remarks: This briefing note was developed in consultation with the following  
Remarques: regions/sectors:  
Pacific Region  
Aquatic Ecosystem Sector

Drafting Officer/ Norma Domenech (613 – 993 3070)/ Luke McKay /nl  
Rédacteur:

**Pages 262 to / à 264  
are withheld pursuant to section  
sont retenues en vertu de l'article**

**69(1)(g) re: (a)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

**Pages 265 to / à 267  
are withheld pursuant to sections  
sont retenues en vertu des articles**

**69(1)(g) re: (d), 69(1)(g) re: (e)**

**of the Access to Information Act  
de la Loi sur l'accès à l'information**

Docket #: 2019-009-00075  
Security Classification: UNCLASSIFIED

### SCENARIO NOTE

#### **MEETING WITH BC MINISTER OF AGRICULTURE LANA POPHAM AND MINISTER OF FORESTS, LANDS, NATURAL RESOURCE OPERATIONS AND RURAL DEVELOPMENT (FLNRORD) DOUG DONALDSON - FEBRUARY 12<sup>TH</sup>, 2019 (VICTORIA, BC)**

##### **Officials Attending**

DFO Minister - Jonathan Wilkinson  
DFO Associate DM – Kevin Stringer  
DFO RDG – Rebecca Reid  
DFO Regional Director Fisheries Management – Andrew Thomson  
Minister RD - John Allan  
Minister of Agriculture- Lana Popham  
DM Agriculture Science and Policy- Wes Shoemaker  
ADM Agriculture Science and Policy - James Mack

##### **Overview**

The purpose of the meeting (Tab 1) is to discuss the Species at Risk process and collaboration with the province to address the decline of Interior Fraser steelhead trout and salmon stocks. Recently, you replied to a letter to your predecessor from Ministers Doug Donaldson and Lana Popham (Biographies Tab 2) regarding the need for improved collaboration to develop recovery solution for the decline of these stocks (See Tab 3). The meeting will also address the Wild Salmon Implementation plan and progress in the British Columbia Salmon Restoration and Innovation Fund (BCSRIF).

Other issues such as aquaculture, marine conservation, and Trapper Lake may be raised during the meeting. Information on these subjects is included in the Annex.

##### **1. Coordination with the Province on and Steelhead Trout**

In February, 2018 the Steelhead trout population in the Thompson and the Chilcotin River were assessed as Endangered in an Emergency Assessment by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). s.69(1)(g) re: (a)

[REDACTED] If listed under SARA, this would trigger automatic prohibitions against killing, harming, harassing, and destroying their residences.  
[REDACTED]

The province has held the position and communicated publically that threats to the Steelhead trout are primarily related to commercial salmon fishing, particularly the Chum Salmon.

s.21(1)(a)

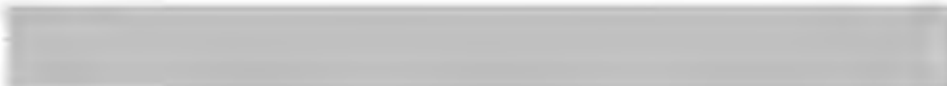
s.21(1)(b)



### **Minister's Objectives**

Identify opportunities for collaboration between the federal and provincial governments on conservation of Steelhead Trout, Pacific salmon and other salmonids in the Fraser River system.

### **Key Messages**

- **I appreciate the ongoing efforts between our governments to ensure the conservation of Steelhead Trout, Pacific salmon and other salmonids in the Fraser River system.**
- **As you know, we have implemented an extended closure period for the commercial chum salmon fishery which is expected to reduce inadvertent bycatch of the Steelhead Trout.**
- **We also appreciate the province's efforts to implement additional recreational fisheries closures to reduce the possibility of harming adult Steelhead.**
- 
- **Going forward, I'm committed to working collaboratively to identify opportunities restore habitat in these areas through existing programs. My officials have been working with staff from FLNRORD Ministry to formalize a stronger working relationship. I understand that an initial meeting took place, and another is set for February 22<sup>nd</sup>. I look forward to the collaboration to develop the strategies necessary to protect this important species.**

## **2. British Columbia Salmon Restoration and Innovation Fund (BCSRIF)**

The BC Salmon Restoration and Innovation Fund (BCSRIF) was jointly announced by you and Minister Popham on November 30th, 2018. The fund will be delivered over 5 years with a 70:30 funding share from DFO and the province respectively. The federal contribution is \$100 million as committed in the 2018 Fall Economic Statement, and will support BC's fish and seafood sector. In addition, a one-time \$5M federal grant to the Pacific Salmon Endowment Fund Society

s.14

s.21(1)(a)

s.21(1)(b)



(PSEFS) announced in the Fall Economic Statement, has received Treasury Board approval.

### **Minister's Objectives**

Re-assure your colleague that discussions will continue with the provincial government to roll-out the fund in a collaborative and timely manner.

### **Key Messages**

- **We remain committed to working with BC to collaboratively launch the BCSRIF to support the long-term environmental and economic sustainability of BC's wild capture and aquaculture sectors, with a focus on salmon stock protection and habitat restoration.**
- **Our grant to the Pacific Salmon Endowment Fund Society (PSEFS) is expected to be ready by the end of March 2019.**
- **I understand our officials are working closely to finalize a framework agreement for delivery of the program, and confirm the terms and conditions for the grants and contributions program.**
- **Work is also underway to develop and establish the funding priorities for the program and it will be important that we continue to work together on an outreach and engagement strategy to be implemented once the funding is confirmed (TBC Spring 2019).**

### **3. Coordination with the Province on Wild Pacific Salmon**

In addition to working with DFO on the creation of the BCSRIF, the province is working on its own "Made-in-BC" salmon strategy, with input from a BC-appointed Wild Salmon Advisory Council.

### **Minister's Objectives**

Re-iterate DFO's interest in collaborating to protect wild Pacific salmon, including identifying potential new opportunities and initiatives, such as the BCSRIF, that can be launched and implemented for International Year of the Salmon (2019).

s.14

s.21(1)(a)

s.21(1)(b)

**Key Messages**

- **It will be important that our governments continue to work closely to identify opportunities to collaborate to protect wild salmon.**
- **As you know, a cornerstone of our strategy to protect wild salmon is the implementation of our new *Wild Salmon Policy Implementation Plan*.**
- **I understand you expect to release the final recommendations of the Wild Salmon Advisory Council very soon and that these recommendations will help shape the BC salmon strategy for launch sometime in 2019.**
- **As you finalize your strategy, I'm keen to work closely with your government to ensure we identify complementarities with DFO's *Wild Salmon Policy Implementation Plan*.**
- **It will also be important to identify potential areas of inconsistency and I'd appreciate your views on where you see any key risks so we can work together to identify solutions that balance the various interests at play.**

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## **Annex**

### **1. BC Salmon Restoration and Innovation Fund (BCSRIF)**

The fund will be mainly used on Science Partnerships, Innovation, and Infrastructure. The BCSRIF is designed to modernize the wild fisheries and aquaculture sectors in BC to better adapt to changing economic circumstances, and environmental impacts, while ensuring clean growth, and the long-term sustainability of the sector. The program will include a collaborative governance structure with joint DFO/BC setting of investment priorities, assessment of project proposals, and collection and reporting of performance data. You will have final approval for all project proposals under the BCSRIF governance structure.

s.69(1)(g) re: (c)

These timelines are necessary to ensure implementation by spring 2019. DFO has already engaged BC in early discussions on joint priority setting and the draft Framework Agreement between DFO and BC so that implementation may begin as soon as approval is received.

The one-time \$5M federal grant to the Pacific Salmon Endowment Fund Society (PSEFS), should be ready to transfer by the end of March 2019. This grant will allow the PSEFS to direct funding to the Pacific Salmon Foundation (PSF) to support small-scale, community-based conservation and wild Pacific salmon restoration activities in the province.

DFO is working closely with officials from the Ministry of Agriculture to finalize a framework agreement for delivery of the program, and confirm the terms and conditions for the grants and contributions program. Work is also underway to develop and establish the funding priorities for BCSRIF, and an outreach and engagement strategy to be implemented once the funding is confirmed and the program can be launched (late Feb-March 2019).

### **2. Coordination with the Province on Wild Pacific Salmon**

The Council's initial report was released in October 2018 and focused on three areas:

1) restoration and enhancement of wild salmon populations; 2) sustainable fisheries management and stewardship opportunities for communities; and 3) new economic development opportunities to assist viable/sustainable local fisheries. (Aquaculture was outside the Council's scope of work).

Following a brief public engagement period, the province expects to receive the final recommendations of the Council on February 8, 2019.

It is anticipated that Council's report will complement some but not all aspects of DFO's *Wild Salmon Policy (WSP) 2018-2022 Implementation Plan*, released publically in fall 2018; while some recommendations are likely to be out of scope (e.g. licensing changes) or potentially inconsistent (increased hatchery production/ocean ranching).

s.14

s.21(1)(a)

s.21(1)(b)

### 3. Coordination with the Province on Steelhead Trout

Steelhead trout are salmonids which face similar threats to those that affect the Pacific salmon. The main threats include inadvertent bycatch of adults by net fisheries targeting Pacific salmon and poor ocean conditions. Actions addressing threats to Steelhead trout will also benefit recovery towards Pacific salmon stocks with which they co-mingle.

BC manages freshwater recreational fisheries for species other than salmon, including Steelhead trout, Rainbow trout, char and other trout, as well as other species such as Sturgeon under the federal *British Columbia Sport Fishing Regulations, 1996* established under the federal *Fisheries Act*. [REDACTED]

The province also has jurisdiction over activities that have direct and indirect effects on aquatic habitats in freshwater systems including the Fraser River watershed and the Thompson and Chilcotin regions. These regions have important cattle ranching areas, and have seen increases in agriculture; these activities require water extraction from the Thompson and Chilcotin rivers, which contributes (along with zonal climate changes and loss of riparian vegetation) to higher temperatures in river systems that adversely affect salmonid health. Forestry practices are also under the responsibility of BC. Agricultural and forestry practices can contribute to siltation and other changes to the water in which salmonids reside and reproduce.

The province has held the position and communicated both to the Department and publically that threats to the Steelhead trout are primarily related to commercial salmon fishing, particularly the Chum Salmon. [REDACTED]

The most important areas for improved DFO/BC cooperation include managing water use/withdrawals, managing/reducing the impacts of forestry and agriculture on fish habitat, improved planning and information management, stewardship, education and building capacity in local communities.

Opportunities to improve habitat currently exist through the Coastal Restoration Fund; Habitat Stewardship Program; the BC Salmon Restoration and Innovation Fund; the Pacific Salmon Endowment Fund. Pending finalization of priorities, there may be opportunities under the Nature Legacy Fund as well.

DFO has dedicated significant effort and funds to habitat restoration and improvement for interior chinook stocks. Many of the target areas overlap with and benefit steelhead, particularly in the Thompson and Nicola systems. DFO has supported many kilometers of streambank restoration, and fish passage structures and improvements, all to improve conditions for chinook and by extension steelhead and has collaborated with BC on some of this work, particularly in the Nicola system.

s.14

s.21(1)(a)

s.21(1)(b)

s.23

DFO's Salmonid Enhancement program (SEP) has also enhanced Steelhead and cutthroat trout for the Province of British Columbia for three decades; the fish produced by DFO directly support a freshwater sport fishery that makes significant contributions to provincial GDP, taxes and licence fee revenues. DFO produces Steelhead on Vancouver Island and in the Lower Fraser River at five of its major SEP hatcheries and at four of its partner-supported hatcheries, under direction from the Province.

DFO has limited hatchery capacity in the BC Interior (one major facility, one contract facility) which is fully subscribed with high priority Chinook and Coho conservation and stock assessment work. There is no DFO capacity for Steelhead enhancement in the interior without significant trade-off with salmon conservation and stock assessment for Pacific Salmon Treaty obligations. However, there are other hatchery facilities in the BC Interior, notably the Province's Clearwater Trout Hatchery and UNBC's Quesnel River Research Centre.

The Province has a Steelhead management framework and policy that all hatchery Steelhead production is carried out for the purpose of providing harvestable fish for anglers and not for rebuilding or sustaining wild stocks.

#### **4. Aquaculture**

On December 14, 2018, BC Premier John Horgan announced a new approach for aquaculture in the Broughton Archipelago in an effort to create a migration path for wild salmon. Over a five-year period (2019-2023) there would be a transition of 17 open-net fish farms out of the area based on short, medium and long-term actions. Under an agreement between the BC government, First Nations and Industry, 10 farms operating in the area will cease operations by 2022, some of them immediately. The remaining seven will shut down the following year unless agreements between the industry and First Nations are put in place along with renewed federal fisheries licences.

The decision is part of a set of recommendations reached through a government-to-government consultation between the province and the Kwikwasut'inuxw Haxwa'mis, 'Namgis and Mamalilikulla First Nations. The recommendations include the establishment of First Nation oversight, during transition, through the Indigenous Monitoring and Inspection Plan (IMIP). The two aquaculture companies that operate in the area, Qermaq Canada and Marine Harvest Canada, have drafted letters of support for the process. In the letters they pledge to contribute to the IMIP and restoration initiatives, but there is no indication of the level of support.

On December 10, 2018, the Government of Canada announced a suite of initiatives to ensure that the aquaculture sector is economically successful and environmentally sustainable. Key initiatives include:

- A study on the alternative technologies for aquaculture, including land- and sea-based closed containment technology. The study will be conducted in partnership with

Sustainable Development Technology Canada and BC.

- Moving towards an area-based approach to aquaculture management –Developing a framework for aquaculture risk management, based on the precautionary approach, which will ensure the sustainable management of aquaculture and will be the overarching framework for future policies.
- Creating a single comprehensive set of regulations, the General Aquaculture Regulations. This will bring more clarity for industry, stakeholders and the Canadian public about how aquaculture is managed for responsible growth in Canada.

#### **Key Messages**

- **I would like to thank you for cost-sharing the study of alternative salmon production technologies and for providing expertise to our Project Steering and Management Committees.**
- **I am hopeful that the development and adoption of a Framework to Aquaculture Risk Management based on a precautionary approach will increase understanding of how we scientifically assess risks associated with aquaculture activities and determine mitigation options.**
- **I am pleased to hear about your support for the development of a federal aquaculture act. I believe the proposed new act and consolidated aquaculture regulations will provide much needed clarity and certainty for the industry, stakeholders and the Canadian public in general.**

## 5. Marine Conservation

In 2015, the Government of Canada made a commitment to reach the international target of protecting 10 percent of our marine and coastal areas by 2020. By working with federal and provincial partners and through implementation of a five-point plan that advanced establishment of federal Marine Protected Areas (MPAs) and other effective area-based conservation measures (OECMs), the Government successfully surpassed its domestic interim target of 5 percent protection in December 2017. The Government of Canada will continue to implement its five-point plan to achieve 10 percent by 2020. As of June, 2018, Canada had conserved approximately 7.9 percent of its ocean territory.

There are a number of federally and provincially protected sites in the Pacific Ocean adjacent to BC that count toward the marine conservation target. By 2020, it is anticipated that a new Offshore Pacific MPA will be designated. The Pacific Region is currently conducting bi-lateral meetings with First Nations to establish cooperative management agreements and/or memoranda of understanding relating to this area. The Pacific Region is also incorporating feedback from stakeholders into a risk assessment that will help to inform prohibited activities in the MPA. The province has been regularly kept apprised of progress on MPA development through the Regional Committee on Oceans Management and the Oceans Coordinating Committee, and has nominated an observer to attend stakeholder advisory committee meetings.

It is anticipated that the regulatory intent for the establishment of the Pacific Offshore Area of Interest will be completed by spring 2019.

DFO is collaborating with BC and Coastal First Nations to develop an MPA network for the Northern Shelf Bioregion. First Nations are engaged as equal partners in MPA network development, and will make decisions alongside the federal and provincial governments, guided by the Canada-British Columbia MPA Network Strategy and within the context of the Pacific North Coast Integrated Management Area (PNCIMA) initiative. A draft network scenario has been developed by the MPA Network governance partners, and Canada, BC, and partnering First Nations undertook a review of the draft scenario beginning in fall 2018. DFO's internal review identified the need for ongoing complementary work to refine the design scenario. Given some outstanding questions raised during the internal review, a planned MPA Network Forum (scheduled December 10-11, 2018) was postponed.

The delay of engagement [redacted] and has raised questions and concerns from stakeholders regarding timelines. The Marine Protected Area Technical Team (MPATT) is coordinating a webinar on February 28, 2019 to provide stakeholders with an opportunity to review and provide feedback on the draft MPA network design scenario, which will be followed by bilateral meetings.

s.14

s.21(1)(a)

s.21(1)(b)

### Key Messages

- **Our government recognizes the importance of protecting Canada's marine and coastal areas, and we are well on our way to reaching 10% by 2020.**
- **Our government remains committed to working collaboratively with provincial/territorial partners, First Nations, and stakeholders to achieve our marine conservation target, and plan for future conservation efforts. It is through partnerships like those for the Northern Shelf Bioregion that significant milestones can be achieved.**

### 6. Trapper Lake

A foundational element of the Pacific Salmon Treaty involves Canadian and U.S. cooperation to support increased production of sockeye salmon for fisheries, through low-technology hatchery augmentation. Specifically, Canadian fishery access to sockeye salmon allowable catch allocations in northwestern BC are determined annually based on the number of enhanced sockeye salmon produced. As more enhanced sockeye salmon are produced Canadian fisheries gain access to a greater proportion of the overall number of sockeye salmon available.

For over 20 years DFO has been working with the Taku River Tlingit First Nation and the Alaska Department of Fish and Game to develop feasible and cost-effective sockeye salmon programs in north-western British Columbia's Taku River watershed. The Taku River Tlingit First Nation have significant food fishery interests in sockeye salmon and are a majority commercial fishery licence holder. The First Nation successfully operates a commercial fishery cooperative that provides employment, facilitates job-skills training and contributes economic benefits to its citizens and the local community of Atlin, BC. The sockeye salmon commercial fishery is one of only a few consistent economic opportunities in this remote region.

DFO has developed a proposed sockeye salmon enhancement project in Trapper Lake (an isolated lake in the headwaters of the Taku River watershed). It is one of only two feasible projects identified to date. A residual population of land-locked sockeye salmon (kokanee) are present in Trapper Lake, however adult salmon are no longer able to consistently access the lake due to a migration barrier at the outflow that has resulted from reduced water levels due to a changing climate. Establishing adult sockeye salmon passage, when combined with a fry outplant program, will result in the production of up to 15,000 sockeye salmon per year. The majority of these fish will be available to Canadian fisheries and contribute \$500K per year to the local economy (a 25% increase over the current fishery value).

In order for the project to proceed, DFO requires regulatory approval from the Province of BC to modify the stream channel to allow for adult sockeye passage to Trapper Lake. Although intergovernmental discussions have been ongoing for several years,

Due to its isolation, Trapper Lake has no existing or historical fisheries.

s.14(a)

s.21(1)(a)

s.21(1)(b)



The Taku River Tlingit First Nation and local community members in Atlin are strongly in support of the project.

**Key Messages:**

- **Realizing the completion of the Trapper Lake sockeye salmon enhancement project is a significant Canadian interest under the Pacific Salmon Treaty.**
- **The project is of considerable interest to the Taku River Tlingit First Nation as it will provide significant economic benefits to the First Nation and rural community of Atlin.**
- **The Department is seeking BC's cooperation to enable the project to proceed.**

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**Meeting between**

**Hon. Jonathan Wilkinson, Minister of Fisheries and Oceans and the Canadian Coast Guard**

**and**

**Ms. Lana Popham, BC Minister of Agriculture**

**and**

**Mr. Doug Donaldson, BC Minister of Forests, Lands, Natural Resource Operations and Rural  
Development.**

**February 12, 2019 (3:30PM to 5:30PM)**

**Location To Be Determined**

**AGENDA**

	<b>Agenda Item</b>
<b>Steelhead</b>	
DFO	Outline of the issue and SARA Process
BC	Provincial Perspective
ALL	DFO – BC Collaboration and Governance
<b>Wild Salmon</b>	
DFO	DFO Wild Salmon Implementation Plan
BC	BC Wild Salmon Advisory Committee Recommendations and Actions
ALL	BC Salmon Restoration and Innovation Fund

**Officials Attending**

**DFO Associate DM – Kevin Stringer**

**DFO Regional Director Fisheries Management – Andrew Thomson**

**Minister FLNROD - Doug Donaldson**

**DM FLNROD - John Allan**

**Minister of Agriculture- Lana Popham**

**DM Agriculture Science and Policy- Wes Shoemaker**

**ADM Agriculture Science and Policy - James Mack**

**Honourable Lana Popham**

**Minister of Agriculture**



Lana was raised on Quadra Island in a do-it-yourself community, where growing food, raising animals and harvesting from the sea was a way of life.

Her interest in urban planning led her to UBC where she graduated with a degree in geography.

In 1996, Lana made her home in Saanich South. She co-founded and operated Barking Dog Vineyard, the first certified organic vineyard on Vancouver Island. She also managed a crew of vineyard workers who took care of many vineyards on the Saanich Peninsula, and has been a strong advocate for food producers in Saanich for many years.

Lana served on Saanich's Planning, Transportation and Economic Development Committee and on the Peninsula Agricultural Commission. She was also president of the Vancouver Island Grape Growers Association, chair of the Certification Committee for the Islands Organic Producers Association, and a member of the Investment Agriculture Board.

After being elected in 2009, Lana served as Opposition critic for agriculture for eight years.

**Honourable Doug Donaldson**  
**Minister of Forests, Lands, Natural Resource Operations**  
**and Rural Development**



Prior to becoming an MLA, Doug worked for Storytellers' Foundation, a non-profit organization focusing on community economic development in the region, including local food action initiatives. His previous work in Stikine included jobs in forestry, tourism, education, communications and journalism. He has worked as a biologist with a forestry consulting business, as a reporter and columnist with a weekly newspaper, communications director with the Gitksan Treaty Office, co-ordinator of the cultural tourism program at Northwest Community College, and instructor with the Gitksan Wet'suwet'en Education Society. He has also owned and operated businesses in the B.C. Rockies.

Doug's many years in the northwest included living in Smithers and Telkwa before settling in Hazelton, where he was a four-term municipal councillor. He has travelled extensively throughout the Stikine constituency, which overlays the traditional territories of seven First Nations.

Doug is married and has two adult children. He enjoys skiing, hiking, running and tending to his chickens, turkeys, sheep and llamas. His formal education includes an undergraduate degree in biology and a master's degree in journalism.

**Minister / Ministre (DFO/MPO)**

---

**From:** Minister, FLNR FLNR:EX <FLNR.Minister@gov.bc.ca>  
**Sent:** March-28-18 5:52 PM  
**To:** Minister / Ministre (DFO/MPO)  
**Subject:** Letter from Minister Donaldson and Minister Popham re. Interior Fraser Steelhead (ref: 237216)  
**Attachments:** 237216 - final.pdf

Dear Minister:

Attached is a letter from Honourable Doug Donaldson, Minister of Forests, Lands, Natural Resource Operations and Rural Development, and Honourable Lana Popham, Minister of Agriculture. Please note, a hardcopy will follow in the mail.

Thank you.

2018-001-00575



Reference: 237216

March 23, 2018

VIA EMAIL: [min@dfp-mpo.gc.ca](mailto:min@dfp-mpo.gc.ca)

The Honourable Dominic LeBlanc, P.C., Q.C., M.P.  
Minister of Fisheries, Oceans and the Canadian Coast Guard  
200 Kent Street  
Statin 15N100  
Ottawa, Ontario  
K1A 0E6

Dear Minister:

We are concerned about the fate of Interior Fraser steelhead and salmon stocks.

Our government shares the concerns of all British Columbians for the conservation of Fraser steelhead and salmon. As you may know, the Committee on the Status of Endangered Wildlife in Canada is recommending that these two iconic runs be listed as endangered under the *Species at Risk Act* through an emergency process due to the approximately 80 percent decline in Thompson and Chilcotin steelhead numbers over the last several years. We are also aware that no less than 20 strains of Fraser salmon are also being considered for listing.

These developments highlight the need for improved collaboration between our governments, First Nations, and stakeholder groups as a means to develop effective recovery solutions for all salmonid stocks in the Fraser River.

The Ministry of Forests, Lands, Natural Resource Operations and Rural Development continues to lead efforts to manage and protect steelhead through regulatory restrictions on recreational angling, mitigation efforts, and protection from impacts to riparian and freshwater habitat, as well as by leading Indigenous and community engagement processes directed at reducing steelhead harms. Specifically, this ministry has closed all recreational fisheries for the Thompson and Chilcotin steelhead runs, protected habitat under the *Fish Protection Act*, the *Forest and Range Practices Act*, and more recently, the *Water Sustainability Act*.

Page 1 of 3

**The Honourable Dominic LeBlanc, P.C., Q.C., M.P.**

Each of these actions can impact land and water use as well as recreational opportunities, all of which have substantial direct and indirect economic consequences. For example, during a severe drought in 2015, critical low flows were maintained in the Nicola basin by restricting agricultural use of water, and thus protecting the chinook runs. These activities demonstrate the essential role that the province plays in regards to fish population and freshwater habitat management. The resulting benefits from these actions are realized not only for steelhead, but for salmon as well.

Most interior First Nations have voluntarily ended food, social and ceremonial fisheries, and other First Nations are actively engaging with their membership to voluntarily end all harvest. Our engagement to date with impacted First Nations has been positive, and they are seeking ways to participate in recovery efforts. Our government continues to seek more precautionary approaches to salmon harvest. We believe this can be accomplished through the development of better salmon harvesting strategies. The continued decline of populations suggests that more must be done beyond the past approach of managing the timing and duration of openings.

We are involved in the early draft of the Integrated Fisheries Management Plan, and our staff will continue to work with yours to better understand the assessment of impacts and approaches that Fisheries and Oceans Canada will use to manage the Fraser fisheries. Actions taken by the Oregon and Washington to implement mark selective fisheries, to reduce handling of non-target species through a combination of time/area/gear restrictions, and to implement regulations designed to improve post-release survival of non-target species can provide insight into the possibilities for management approaches in the lower Fraser River.

Overall, it is critical that First Nations, stakeholder groups, the province, and the federal government share a common vision for healthy Fraser salmon populations. We have a shared accountability to restore at-risk stocks and to build confidence and trust in our management actions with the people of British Columbia. To that end, we believe we now have an opportunity to successfully recover salmon stocks by improving our working relationship, building collaborative solutions, and by deeply engaging with Indigenous peoples and other stakeholder groups who have a critical stake in salmon management and recovery.

We are, therefore, requesting to meet with you and your staff to discuss implications of the current population status, potential actions, and to define the next steps, including the possibility of renewing the now dated Canada – British Columbia Agreement on the Management of Pacific Salmon Fishery Issues (1997). This conversation will help inform our collaborative efforts and priorities to achieve our shared goals.

**The Honourable Dominic LeBlanc, P.C., Q.C., M.P.**

Significant progress in this area will benefit other issues related to salmon management including salmon stocking decisions in British Columbian waters that are made without the province's support. These stocking decisions are increasing tensions, not only between the province and the First Nations engaged in the stocking, but also among First Nations who recognize that these stocking activities have the potential to impact ecosystems in their high-strength-of-claim territories. Benefits could also include aligning outcomes with the International Year of the Salmon (2019) and the release of your Department's Wild Salmon Policy Implementation Plan.

We look forward to our offices making the necessary arrangements and to meeting with you at your earliest opportunity.

Sincerely,



**Doug Donaldson**  
Minister of Forests, Lands  
Natural Resource Operations  
and Rural Development



**Lana Popham**  
Minister of Agriculture



## **Overview of Status of DFO/BC Collaboration to Support Recovery of Thompson and Chilcotin River Steelhead Populations**

### **Background:**

Fisheries and Oceans Canada (DFO) and the Province of BC have progressed with a collaborative relationship focused on addressing Thompson and Chilcotin River Steelhead populations. An Executive Committee was established to support cooperation on work following the COSEWIC assessment of these stocks as "endangered" – this emergency assessment triggered specific follow-up actions under the Species at Risk Act (SARA) with very tight timelines. The committee included representatives from DFO, Ministry of Agriculture, Ministry of Forests, Lands, Natural Resource Operations and Rural Development, and Ministry of Environment, and provided for cooperation and collaboration between the various agencies, who all hold responsibilities that have implications for these steelhead stocks of concern.

### **Recent Developments:**

A meeting of senior DFO and BC officials was recently held to continue discussions on a number of matters, including the need for continued collaboration on steelhead. It was agreed that BC would provide some draft Terms of Reference for a "Task Team" that would provide ongoing cooperation and direction with respect to identifying and implementing actions to support recovery of these steelhead populations. As well, BC prepared a preliminary draft "Emergency Action Plan" as an initial step in identifying actions that could be taken immediately and into the longer term to support Thompson and Chilcotin steelhead populations.

### **Next Steps:**

DFO is reviewing the documents, and a further discussion among senior DFO and BC officials is planned for the third week of February.

**Pages 287 to / à 296**  
**are not relevant**  
**sont non pertinentes**



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Deputy Minister

Sous-ministre

Mark Zacharias  
Deputy Minister  
Minister of Environmental and Climate Change Strategy  
PO Box 9339 Stn Prov Govt  
Victoria, BC  
V8W 9M1

Dear Deputy Minister Zacharias,

It was good to have the opportunity to meet with you during your recent visit to Ottawa. I know that collaborations between Canada and the Government of British Columbia (BC) are vitally important and so wanted to respond to your correspondence of January 24, 2019, addressed to Deputy Minister Stephen Lucas to clarify our science on the Chilcotin and Thompson River designatable units of Steelhead Trout.

As indicated in your letter, the Chilcotin and Thompson River populations of Steelhead Trout were both assessed as endangered (Emergency Assessment) in January 2018 by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). To respond to this COSEWIC assessment, DFO undertook a Recovery Potential Assessment (RPA) to help inform the Minister of Environment and Climate Change Canada on these populations.

As you know, the Canadian Science Advisory Secretariat (CSAS) Regional Peer Review discussions took place on September 20-21, 2018, with participants from DFO, the Province of BC, academia, First Nations, and members from COSEWIC. I realize that following the posting of the Science Advisory Report (SAR) on the CSAS website, the Province raised two specific concerns: 1) the revised description of "allowable harm" gives an impression that current level of harm is an option; and 2) the inclusion of results from the terminal year productivity scenario in the framing of the simulation results were downplaying the impact of bycatch in commercial fisheries. In each case, changes were made to the SAR specifically to clarify the results and conclusions to be consistent with consensus advice from the peer review.

Further, the changes with respect to simulation results took account of input provided by a Provincial participant at the CSAS meeting who noted that the results presented over-estimated the current productivity as they were based on 10- and 5-year average productivity rates, which are higher than the terminal productivity. Based on terminal productivity scenarios, the probability of recovery is diminished. The language regarding allowable harm was revised to be stronger: in both versions, each bullet clearly notes that "any harm will inhibit or delay potential recovery". The revised bullet includes this, and a further

recommendation that “[a]llowable harm should not be permitted to exceed current levels, and should be reduced to the maximum extent possible”.

I want to assure you that DFO took steps to meet with provincial officials to explain and attempt to address these two concerns. On December 10, 2018, DFO provided an overview of the CSAS review process and detailed explanations for the changes (Annex 1) between the initial draft and final SAR. In a follow-up communication on December 13, 2018, DFO noted that the proceedings from CSAS peer-review meetings aim to document all points of consensus and dissent and offered to include an unedited dissenting opinion in the Proceedings Report to appropriately reflect concerns raised. At this point, no response to this offer has been received. In terms of the status of the Research Document, a revised version has been submitted by the authors (a DFO contractor and a Government of BC scientist) to reflect the recommended revisions made during the September CSAS peer review meeting. The Department is currently validating the revisions based on the record of discussion from the meeting and once complete, the document will be approved for publication.

I hope this clarifies your concerns. DFO is committed to maintaining a strong peer-review process in developing the science advice to inform Government of Canada decision making and is keen to continue engagement with BC on independent and collaborative actions to support the recovery of these populations.

Yours sincerely,

Timothy Sargent

cc: Stephen Lucas, Deputy Minister, Environment and Climate Change Canada,  
John Allan, Deputy Minister, Ministry of Forests, Lands, Natural Resource Operations and  
Rural Development

Attachment: Issues/Concerns Raised by Government of British Columbia Officials



Fisheries and Oceans Canada  
Correspondence Routing Slip

Fiche d'acheminement de correspondance  
Pêches et Océans Canada

CLASSIFICATION  
GCCMS #: 2019-009-00114  
EKME #: 4021002

To: Timothy Sargent  
Pour:

Date: FEB 21 2019

Object: LETTER FROM DEPUTY MINISTER ZACHARIAS, BRITISH COLUMBIA,  
Objet: REGARDING STEELHEAD TROUT

From / Louise Laverdure, DG, Ecosystem Science  
De:

2-2 FEB 13 2019

Via: Arran McPherson, ADM, Ecosystems and Oceans Science

FEB 21 2019

Additional approvals:  
Autre(s) approbation(s):

A

☐ Material for the Minister  
Documents pour le Ministre

☒ Your Signature  
Votre signature

☐ Information

Remarks: This briefing note was developed in consultation with the following  
Remarques: regions/sectors: Pacific Region

Distribution: Sylvie Lapointe, Philippe Morel

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Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Ecosystems and  
Oceans Science

Sciences des écosystèmes  
et des océans

Assistant Deputy Minister

Sous-ministre adjointe

UNCLASSIFIED

2019-009-00114  
EKME #: 4023922

MEMORANDUM FOR THE DEPUTY MINISTER

**LETTER FROM DEPUTY MINISTER ZACHARIAS, BRITISH COLUMBIA,  
REGARDING STEELHEAD TROUT  
(FOR SIGNATURE)**

**SUMMARY OF ADVICE TO DEPUTY MINISTER**

On January 24, 2019, Mark Zacharias, Deputy Minister, British Columbia Ministry of Environment and Climate Change Strategy, wrote to your colleague Stephen Lucas, Deputy Minister, Environment and Climate Change Canada, regarding collaboration between Canada and the Government of British Columbia on the recovery of the Chilcotin and Thompson River designatable units of Steelhead Trout (Tab 1).

The purpose of this note is to provide you with a letter of response (Tab 2) to Deputy Minister Zacharias, on behalf of Deputy Minister Lucas.

FEB 22 2019

Arran McPherson

**Attachments: (2)**

- 1) Letter dated January 24, 2019, signed by Deputy Minister Mark Zacharias, including Appendix 1
- 2) Proposed letter for signature by Deputy Minister Tim Sargent



Reference: 338738

**JAN 24 2019**

Stephen Lucas, PhD  
Deputy Minister  
Environment and Climate Change Canada  
200 Boulevard Sacré-Coeur, 2nd Floor, Office 249  
Gatineau QC K1A 0H3

REC'D - DCU - DOE

FEB 04 2019

REÇU - UCM - MDE

Dear Deputy Minister Lucas:

Protecting species at risk is a priority of both our governments. We have a long history of conservation-oriented collaboration, and this past year was no exception. In addition to our joint work on the conservation and protection of southern mountain caribou, the Government of BC has been working closely with federal colleagues at the Department of Fisheries and Oceans (DFO) on the recovery of Interior Fraser Steelhead (also known as the Chilcotin and Thompson River designatable units of Steelhead Trout).

In February 2018 the Committee on the Status of Endangered Wildlife in Canada conducted an emergency assessment and concluded that Interior Fraser Steelhead were endangered and at imminent risk of extinction. In support of the subsequent modified Recovery Potential Assessment initiated by DFO, Canada and BC engaged in open and transparent collaborations in recognition of the importance, complexity and time sensitive nature of this work. The intention was to provide decision-makers with consensus-based summaries of the science and management considerations needed to inform decisions, including your Minister's upcoming decision on its imminent risk of extinction.

The science-based collaborations between Canada and BC were a significant undertaking by both governments. It marked the first time federal and provincial governments worked together on a modified Recovery Protection Assessment. In terms of our science-based work, stock assessment specialists from all levels of government (including many affected First Nations) reached consensus on model simulations to estimate future abundance; this is the first time this has happened with a co-managed species. This collaboration resulted in the production of a Research Document authored by three respected experts, reviewed by three external reviewers and supported with input from 42 other experts spanning government, industry, academia, First Nations and non-governmental organizations—an impressive accomplishment.

...2

Ministry of Environment and  
Climate Change Strategy

Office of the  
Deputy Minister

Mailing Address:  
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Victoria BC V8W 9M1

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- 2 -

In December 2018, DFO published a condensed version of that Research Document, known as the Science Advisory Report. Early versions of that report's summary bullets were reviewed and supported by the lead authors of the Research Document. The version that DFO ultimately published was unilaterally changed. Through a few seemingly small editorial changes, the new DFO-authored summary conclusions are no longer scientifically defensible, and no longer consistent with the Research Document. These new bullets also support status-quo commercial salmon harvesting, which is the only substantial threat to Interior Fraser Steelhead that can be immediately mitigated. The lead authors of the Research Document were not consulted on these changes, nor was the Government of BC. DFO has been approached regarding these changes, but refused to adjust the current summary bullets on the basis that the changes were made in accordance with internal DFO procedure (the rationale for which has not been shared).

Attached to this letter are the summary bullets discussed above. Appendix 1 outlines the changes made by DFO to the summary bullets, as well as an explanation of the significance of these changes. Appendix 2 includes the summary bullets that are consistent with the Research Document and were supported by the lead authors. The key message lead authors wanted to communicate was there are risks and limiting factors that are the source of the significant Interior Fraser Steelhead population declines. To recover these stocks, actions need to be taken on all. However, for many of the risks and limiting factors it will take time to put in place mitigation strategies, with one notable exception: reducing interception in federally managed fisheries. This is one area where immediate action can be taken, and an immediate benefit to stem the decline of Interior Fraser Steelhead populations can be realized.

It is essential that decision makers, including your Minister, be provided with science advice that is independent of fisheries management considerations. To this end, the Government of BC requests that the original version of the summary points, agreed upon by the science collaborations, be shared with your Minister as part of her decision regarding the imminent threat to the extinction of Interior Fraser Steelhead (Appendix 2).

The Government of BC is committed to addressing the risks to the Interior Fraser Steelhead and bringing decades of investment in science to inform the decisions affecting the species. The Province has taken decisive actions on this issue. We have activated all possible regulatory options, to the maximum extent possible in all steelhead waters through all stages of their life cycle, to mitigate the downward decline of these populations. The only remaining management lever is to reduce incidental bycatch in other federally-managed fisheries.

- Both the Chilcotin and Thompson Steelhead populations are closed for all recreational fishing;
- The provincial recreational trout fishery, in recognition of potential Interior Fraser Steelhead incidental catch, has now been closed or regulations put into place to limit incidental harms; and

...3



- 3 -

- Habitat protection measures on critical steelhead streams have been established through the *Forest and Range Practices Act*, *Water Sustainability Act* and the *Riparian Areas Protection Act*.

In addition to these provincial measures, several interior First Nations are voluntarily forgoing their constitutional right to harvest salmon, to support steelhead recovery. All of these measures have been put in place as the Interior Fraser Steelhead populations have declined from more than 8,000 spawners to only 277.

If you or your team have any specific questions about these science-based collaborations, please follow up with Manjit Kerr-Upal, Director of Conservation Science at 250 896-2231.

Sincerely,



Mark Zacharias  
Deputy Minister

Enclosure (2):

Appendix 1: Science Advisory Report summary bullets published by DFO

Appendix 2: Science Advisory Report summary bullets consistent with Research Document and supported by lead authors

cc: John Allan, Deputy Minister, Ministry of Forests, Lands, Natural Resource Operations  
and Rural Development

#### Appendix 1: Science Advisory Report summary bullets published by DFO

NOTE: This is the version of the Science Advisory Report summary bullets that was published by DFO in December 2018. The tracked changes were changes made unilaterally by DFO. An explanation of the significance of these changes, from steelhead science experts, are provided as 'comments.'

• This Recovery Potential Assessment (RPA) focuses on two the Chilkotin and Thompson River Designatable Units (DU) of Steelhead Trout, the Chilkotin River and Thompson River populations, both of which these DUs were assessed as Endangered by COSEWIC in an emergency assessment in January 2018.

• This RPA focuses on the Steelhead anadromous life history type, not the freshwater resident Rainbow Trout.

• Given the shortened timelines required for an emergency assessment, this advice will only address a subset of the usual elements required in an RPA. Any outstanding elements will be addressed in the future as the Species at Risk Act process continues.

• Juvenile Steelhead Trout typically spend 3-4 years in freshwater before undergoing a smoltification process which allows them to live in the ocean. Smolts migrate to sea in the spring and typically spend two or three years in the ocean before returning to spawn.

• The estimated number of mature fish that returned to fresh water from the sea in the fall of 2017 and spawned in the spring of 2018 was 150 for the Thompson DU and 77 for the Thompson and Chilkotin Rivers, respectively DU. The estimated decline of Steelhead Trout spawners over the last three generations has been 79% (over 15 years) for the Thompson DU, and 81% (over 18 years) for the Chilkotin DU.

• Given the shortened timelines required for an emergency assessment, the advice in this RPA only addresses a subset of the elements required in a full RPA. Outstanding elements will be addressed in the future as the Species at Risk Act processes continue.

• Threats and limiting factors identified to be most relevant to the survival and recovery of Steelhead Trout include changes in the marine environment, fishing mortality, degradation of freshwater and marine habitats, predation and competition. General categories of threats and limiting factors were agreed to, however the rationale and scoring for level of impact, causal certainty, and threat risk had greater uncertainty and will require further input and evaluation.

• The recommended distribution target: Recommended Distribution Target is to retain the present level of occupancy in freshwater habitats, thereby avoiding contraction of freshwater range. Five spatial subdivisions sub-areas within the spawning and juvenile rearing areas of the Thompson DU, including the main stem are recommended and two spatial subdivisions are recommended within the Chilkotin DU. These distribution targets are consistent with current level of occupancy in freshwater habitats, and are believed to be sufficient to avoid contraction of freshwater range.

• The recommended abundance recovery target: Recommended Abundance Recovery Target for the Thompson Steelhead Trout DU is 938 spawners. This value, which also meets the distribution target, is the total escapement to the DU that results in a 95% probability that a minimum of 100 spawners returns to each of its five sub-areas in the same year, which is 938 spawners.

• Using Recommended Abundance Recovery Target for Chilkotin Steelhead Trout DU is 562-744 spawners, using a length-standardized requirement of 1.8-2.4 spawners/km. This also meets the recommended abundance recovery distribution target for the Chilkotin DU is 562-744 spawners.

• Simulations: Model simulations suggest increases in future abundances of both DUs are conditional on improvements in natural productivity. Exploitation rate (fishing mortality) reduction has the potential to lessen rates of decline if the most recent productivities observed continue in the future. If productivities improve slightly to the recent 5- or 10-year levels, simulations suggest exploitation has strong potential for imparting positive future abundance trajectories. However, eliminating exploitation alone will not result in population recovery.

Comment [WMS]: The "uncertainty" was limited to discussion on the Threat Risk posed by bycatch in commercial fisheries of "medium" or "high". By removing ALL of the threats table, and leaving all of the limiting factors table in, the edits shift concern away from the threat of harvest.

Comment [BRP2]: FYI: The order diminishes the importance of the important factors. The research document says that the scientifically supported and important factors are basically three: (1) predation by planktivores, (2) competition in offshore marine habitats in the context of the condition of these habitats, (3) fishing.

..... *Choose the way how numbers and decreasing levels* Uncertainties remaining the estimation rate estimator, unaccounted for fixed rate terminal harvest, and variations in experiment for-year identified as having the potential to affect the estimated productivity of each population.

\* For the Thomson DU, simulations estimate that if productivity lags from the most recent year, script (recruits/revenue), recovery is not expected regardless of abolition rate. If productivity doubles (1.0 and 5-year time period), the estimated recovery probability exceeds 47% for all abolition rates. However, if the 1-year time period productivity doubles, recovery probability estimates are 1.2% or less under all abolition rates.

\* For the Calixto DU simulations, estimates that recovery probability is zero at all exploitation rates if productivity levels from the most recent year persist, but recovery probability exceeds 30% at all exploitation rates. If productivity increases to 5-year mean level, if the 5- and 10-year mean productivities double (10 and 5-year time periods), the estimated recovery probability exceeds 74% at all exploitation rates.

- Given the declines and very low abundances of both the Thompson and Chinook Age-0 steelhead populations, any harm to delay potential recovery—the least possible alternative—herein and potentially result in further declines in abundance. Allowable harm should not be permitted as a means to exceed current levels and should be reduced to the maximum extent possible. Propagation and monitoring, habitat destruction, personnel management, excessive dammed habitat, and reducing exploitation to reduced below-normal levels of exploitation wherever possible, to the extent possible, are immediate actions that will increase the likelihood that allowable harm will not exceed current levels and postpone recovery if productivity increases.

**Comments (10/17/93):** This should not be a secondary point. These features, while they exist, are very useful to change the basic conclusion. Otherwise, we would have not concluded with the students.

Comment [1987-4] These two points replace a single point defined by us the authors of the Research Document. That point was as follows:

- Simulations suggest increases in future abundances of both DA's are consistent with improvements in natural productivity. Exploitation rate reductions may be the preferred to lower rates of decline if the most recent production observed continues in the future. If productivity improves slightly in the next 3 or 10-year block, simulations suggest exploitation has strong potential for keeping positive future abundance trajectories.

**The big difference here is that the S&P authors estimate the beta from Probability of Growth (assuming population growth) to Probability of Recession. A focus on the latter is not statistically different from assuming about future business assumptions about future productivity based on observations of past productivity are statistically based. Beyond a 3-5 year future time frame, and of variations in recovery needs 3-5 year and typically require many decades under most economic conditions. We say this in the Research Document.**

[illegible]

We also did not include a source of bias due to optimism in the necessary profits by bringing forward the derivation of the needed productivity. Some of the research interest in decision how the EU's might act if adopted problem was substantially reduced as if effects competition were substantially decreased, number of which were considered

**Comment (note):** This statement is the vague statement that I didn't caught our immediate attention. The use of the word "our" means multiple. It can't be both.

**Comment [1995]:** This sentence describes the importance of taking on a short and medium term commitment here. Nothing can be described immediately whereas "mitigating habitat destruction" and "restoring damaged habitat" cannot be controlled immediately. Also note that this is misleading for most people because "habitat" implies freshwater habitat. Most people don't think about marine habitat when they say habitat.

## **Appendix 2: Science Advisory Report summary bullets supported by RPA Research Document authors**

*NOTE: This is the version of the Science Advisory Report summary bullets is consistent with the RPA Research Document (soon to be published by DFO) and was reviewed and supported by the lead authors.*

- This Recovery Potential Assessment (RPA) focuses on two Designatable Units (DU) of Steelhead Trout, the Chilcotin River and Thompson River populations, both of which were assessed as Endangered by COSEWIC in an emergency assessment in January 2018.
- This RPA focuses on the Steelhead anadromous life-history type, not the freshwater resident Rainbow Trout.
- Given the shortened timelines required for an emergency assessment, this advice will only address a subset of the usual elements required in an RPA. Any outstanding elements will be addressed in the future as the Species at Risk Act process continues.
- Juvenile Steelhead Trout typically spend 2-4 years in freshwater before undergoing a smoltification process which allows them to live in the ocean. Smolts migrate to sea in the spring and typically spend two or three years in the ocean before returning to spawn.
- The number of mature fish that returned to fresh water from the sea in the fall of 2017 and spawned in the spring of 2018 was 150 and 77 for the Thompson and Chilcotin Rivers, respectively. The estimated decline of Steelhead Trout spawners over the last three generations has been 79% (over 15 years) for the Thompson DU, and 81% (over 18 years) for the Chilcotin DU.
- Threats and limiting factors identified to be most relevant to the survival and recovery of Steelhead Trout include changes in the marine environment, fishing mortality, degradation of freshwater and marine habitats, predation and competition.
- The recommended distribution target is to retain the present level of occupancy in freshwater habitats, thereby avoiding contraction of freshwater range. Five spatial subdivisions within the spawning and juvenile rearing areas of the Thompson DU are recommended and two spatial subdivisions are recommended within the Chilcotin DU.
- The recommended abundance recovery target for the Thompson Steelhead Trout DU is the total escapement to the DU that results in a 95% probability that a minimum of 100 spawners returns to each of its five sub-areas in the same year, which is 938 spawners.
- Using a length-standardized requirement of 1.8-2.4 spawners/km, the recommended abundance recovery target for the Chilcotin DU is 562-744 spawners.
- Simulations suggest increases in future abundances of both DU's are conditional on improvements in natural productivity. Exploitation rate reduction has the potential to lessen

rates of decline if the most recent productivities observed continue in the future. If productivities improve slightly to the recent 5 or 10 year levels, simulations suggest exploitation has strong potential for imparting positive future abundance trajectories.

- Given the very low numbers and decreasing trends in escapement for both the Thompson and Chilcotin river Steelhead populations, any harm will inhibit or delay potential recovery. The lowest possible allowable harm should be permitted at this time, habitat destruction prevented or mitigated and exploitation be reduced below current levels of exploitation wherever possible.



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

Deputy Minister

Sous-ministre

FEB 25 2019

Mark Zacharias  
Deputy Minister  
Minister of Environmental and Climate Change Strategy  
PO Box 9339 Stn Prov Govt  
Victoria, BC  
V8W 9M1

*Mark*  
Dear Deputy Minister Zacharias,

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Canada

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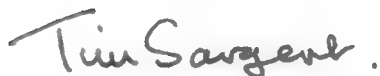
- 2 -

recommendation that "allowable harm should not be permitted to exceed current levels, and should be reduced to the maximum extent possible".

I want to assure you that DFO took steps to meet with provincial officials to explain and attempt to address these two concerns. On December 10, 2018, DFO provided an overview of the CSAS review process and detailed explanations for the changes (Annex 1) between the initial draft and final SAR. In a follow-up communication on December 13, 2018, DFO noted that the proceedings from CSAS peer-review meetings aim to document all points of consensus and dissent and offered to include an unedited dissenting opinion in the Proceedings Report to appropriately reflect concerns raised. At this point, no response to this offer has been received. In terms of the status of the Research Document, a revised version has been submitted by the authors (a DFO contractor and a Government of BC scientist) to reflect the recommended revisions made during the September CSAS peer review meeting. The Department is currently validating the revisions based on the record of discussion from the meeting and once complete, the document will be approved for publication.

I hope this clarifies your concerns. DFO is committed to maintaining a strong peer-review process in developing the science advice to inform Government of Canada decision making and is keen to continue engagement with BC on independent and collaborative actions to support the recovery of these populations.

Yours sincerely,



Timothy Sargent

cc: Stephen Lucas, Deputy Minister, Environment and Climate Change Canada,  
John Allan, Deputy Minister, Ministry of Forests, Lands, Natural Resource Operations and  
Rural Development

Attachment: Issues/Concerns Raised by Government of British Columbia Officials

## Annex 1

### [Previously provided by DFO] Concerns Raised by Government of BC Officials

	Wording - Initial draft	Wording - Approved version	Rationale for wording change
#1	<p>Simulations suggest increases in future abundances of both DU's are conditional on improvements in natural productivity. Exploitation rate reduction has the potential to lessen rates of decline if the most recent productivities observed continue in the future. <b>If productivities improve slightly to the recent 5 or 10 year levels,</b> simulations suggest exploitation has strong potential for imparting positive future abundance trajectories.</p>	<p>For the Thompson DU, simulations estimate that if productivity levels from the most recent year persist (recruits/spawner), recovery is not expected regardless of exploitation rate. If productivities double (10 and 5-year time periods), the estimated recovery probability exceeds 47% for all exploitation rates. However, if the 1-year time period productivity doubles, recovery probability estimates are 12% or less under all exploitation rates.</p>	<p>"IF PRODUCTIVITIES IMPROVE SLIGHTLY" - was determined to be misleading, in that the 'current productivity' level was already an improvement (due to being a 5 year average) relative to latest year of data. The decision was to be clearer about consequence of 'terminal year' productivity, and then provide consequences of empirical improvements (e.g. doubling).</p> <p>See notes below.</p>
#1	<p>Simulations suggest increases in future abundances of both DU's are conditional on improvements in natural productivity. Exploitation rate reduction has the potential to lessen rates of decline if the most recent productivities observed continue in the future. <b>If productivities improve slightly to the recent 5 or 10 year levels,</b> simulations suggest exploitation has strong potential for imparting positive future abundance trajectories.</p>	<p>For the Chilcotin DU, simulations estimate that recovery probability is zero at all exploitation rates if productivity levels from the most recent year persist, but recovery probability exceeds 39% at all exploitation rates if productivity increases to 5-year mean level. If the 5- and 10- year mean productivities double (10 and 5-year time periods), the estimated recovery probability exceeds 74% at all exploitation rates.</p>	<p>IF PRODUCTIVITIES IMPROVE SLIGHTLY - was determined to be misleading, in that the 'current productivity' level was already an improvement (due to being a 5 year average) relative to latest year of data. The decision was to be clearer about consequence of 'terminal year' productivity, and then provide consequences of empirical improvement s(e.g. doubling).</p> <p>See notes below.</p>



	Wording - Initial draft	Wording - Approved version	Rationale for wording change
#2	<p>Given the very low numbers and decreasing trends in escapement for both the Thompson and Chilcotin river Steelhead populations, any harm will inhibit or delay potential recovery. The lowest possible allowable harm should be permitted at this time, habitat destruction be prevented or mitigated and exploitation be reduced below current levels of exploitation wherever possible.</p>	<p>Given the declining and very low abundances of both the Thompson and Chilcotin Steelhead DUs, any harm will inhibit or delay potential recovery and potentially result in further declines in abundance. Allowable harm should not be permitted to exceed current levels and should be reduced to the maximum extent possible. Preventing and mitigating habitat destruction, restoring damaged habitat, and reducing exploitation rates, to the extent possible, are immediate actions that will increase the likelihood that allowable harm will not exceed current levels and promote recovery if productivity increases.</p>	<p>The new language was deemed to be stronger – as 'lowest possible harm' could be interpreted as a level higher than current harm.</p>

Notes: Changes to #1 were based, in part, on input provided by Trevor Davies (BC) who pointed to the need to clarify the ambiguity associated with 'present' productivity and 'improved slightly'.

Based on his input, a third productivity scenario, which assumes that productivity remains at the last data year's level, was simulated for trajectories of future escapement. In both Chilcotin and Thompson this productivity scenario is less optimistic than the 5 and 10 year averages. Additionally, given that Thompson continues to decline even the terminal year productivity trajectory likely overestimates future productivity given the trend. In the summary bullets, clarification is provided regarding the selection of simulation parameters: and the expected consequences for trajectories.

It was clarified that for the Thompson DU, recovery is not expected at current productivity, regardless of exploitation rate. Elimination of exploitation rate alone will not result in population recovery. This stems from a discussion during the peer review meeting, brought up by Trevor Davies (BC) that what the authors were referring to as 'current level of productivity' was actually an average of the previous 5 years and was by consequence already a higher productivity than terminal year.

22/02/19  
9:54 AM

Docket # : 2019-009-00114  
Xref # :  
Date Created : 14/02/19

## HISTORY REPORT

Lead : NCR\_EOS  
ILO : NCR\_DM  
ILO Due :

Subject : Letter from Deputy Minister Zacharias, British Columbia, regarding steelhead trout

### Instructions:

Assigned By	Assigned To	Task	Assign Date	Deadline	Completed date
009	NCR_EOS	PREP	14/02/19	2/15/2019	22/02/19

Note: Based on Speaking points that EOS had already prepared, please develop a response to BC DM letter. No memo needed. Just box note and response letter.

009	NCR_FHM_ADMO	INPUT	14/02/19
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Note: Please provide input to EOS

007	NCR_DM	APP	22/02/19
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### Comments:

- Received IstrateG 22/02/19 9:53 AM

### Attachments

2019 ADMO EOS - 2019-009-00114 - Reponse to DM Zacharias - Memo - ADM Approved.DOCX  
Annex 1\_Steelhead.DOCX  
2019 ADMO EOS - 2019-009-00114 - DM Letter - FINAL VERSION - ADM Approved.DOCX  
2019 ADMO EOS - 2019-009-00114 - FINAL Package - Steelhead Trout - ADM Approved.PDF

FEB 22 2019

*Jasmine 10:30*



Fisheries and Oceans Canada  
Correspondence Routing Slip

Fiche d'acheminement de correspondance  
Pêches et Océans Canada

Received in DMO

FEB 22 2019

9:50 am

CLASSIFICATION

GCCMS #: 2019-009-00114

EKME #: 4021002

To: Timothy Sargent  
Pour:

Date: FEB 22 2019

Object:  
Objet:

LETTER FROM DEPUTY MINISTER ZACHARIAS, BRITISH COLUMBIA,  
REGARDING STEELHEAD TROUT

From / Louise Laverdure, DG, Ecosystem Science  
De:

*L.L.*

FEB 13 2019

Via: Arran McPherson, ADM, Ecosystems and Oceans Science

*A* FEB 22 2019

Additional approvals:  
Autre(s) approbation(s):



Material for the Minister  
Documents pour le Ministre



Your Signature  
Votre signature



Information

Remarks: This briefing note was developed in consultation with the following  
Remarques: regions/sectors: Pacific Region

Distribution: *Sylvie Lapointe, Philippe Morel*

Drafting Officer/  
Rédacteur:

Rowena Orok (613-894-8993) / sm

**Jarjour, Jasmine**

---

**From:** McGill, Stephanie  
**Sent:** Monday, February 25, 2019 1:43 PM  
**To:** Jarjour, Jasmine  
**Subject:** FW: Steelhead Recovery Potential Assessment.docx  
**Attachments:** Steelhead Recovery Potential Assessment.docx

**From:** McPherson, Arran  
**Sent:** February-12-19 11:41 AM  
**To:** Proctor, Jody <Jody.Proctor@dfo-mpo.gc.ca>  
**Cc:** Lowe, Carmel <Carmel.Lowe@dfo-mpo.gc.ca>; Kennedy, Eddy <Eddy.Kennedy@dfo-mpo.gc.ca>; MacDougall, Lesley <Lesley.MacDougall@dfo-mpo.gc.ca>; McGill, Stephanie <Stephanie.McGill@dfo-mpo.gc.ca>; Northcott, Jennifer <Jennifer.Northcott@dfo-mpo.gc.ca>  
**Subject:** Steelhead Recovery Potential Assessment.docx

Hi Jody, here is our science narrative to support the meeting this afternoon. Please let me know if you have questions. As you will see from the enclosed, there are many statements in the letter that aren't supported. Please let me know if there is anything further I can do to assist. Arran.

## **Steelhead Recovery Potential Assessment – Science Response**

### **Recovery Potential Assessment**

- The Chilcotin and Thompson River populations of Steelhead Trout were both assessed as endangered (Emergency Assessment) by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in January 2018 based on a population decline of 79% and 81% respectively over three generations.

s.69(1)(g) re: (a)

- Science was asked to complete a Recovery Potential Assessment - RPA (part of our routine process) to inform a Ministerial opinion on imminent threat [REDACTED]

[REDACTED] Due to the timelines and urgency, an abbreviated Terms of Reference was used for this assessment, recognizing that COSEWIC would undertake a full assessment of the populations in the near future. The consequence of this would be a more fulsome RPA for Steelhead Trout in the future.

- This RPA is generated through the Canadian Science Advisory Secretariat, a process that allows for the development of consensus-based, peer reviewed science. The Pacific Region worked with the province of BC scientists to develop materials and scheduled the meeting. There were experts in attendance from DFO, Academia, the province, First Nations, and COSEWIC.
- The meeting was held September 20-21, 2019.

### **Recovery Potential Assessment Results:**

Population modelling suggests increases in future abundances of both populations are contingent on improvements in Steelhead natural productivity (i.e., increasing the number of surviving fish produced by returning spawners). Based on modeling results, eliminating fishing mortality alone will not result in the populations' recovery; fishing mortality reduction has the potential to lessen decline rates if the most recent productivity levels continue in the future.

Threats and natural limiting factors identified as most relevant to survival and recovery include changes in the freshwater and marine environment, fishing mortality, freshwater and marine habitats degradation, predation and competition. Preliminary feasible mitigation measures identified include: reduced fishing mortality, maintaining current freshwater distribution, and maintaining or improving freshwater habitats, including addressing water use issues.

### **Issues Raised by the Province of BC**

- In terms of process for developing Science Advisory Reports (SARs), which form the basis for advice and not the Research Documents, at the meeting, draft materials are provided for initial review and discussion. Summary bullets are discussed but participants are reminded that they will not be wordsmithing during the meeting, but that the goal is to come to consensus on the general intent of a bullet. Following the meeting, the draft SAR, with the draft bullets, are then

circulated to all participants of the peer review for a more fulsome review of the draft and opportunity to provide edits.

- The Chair then receives all written edits from the circulated SAR, and incorporates submitted edits to finalize the SAR. The document is reviewed by the responsible science official (in this case Carmel Lowe) and copy-editing is done for readability. Invariably, this will result in changes to the bullets (and other parts of the SAR) that were reviewed during the meeting. This same process was followed for the Steelhead RPA.
- [REDACTED]
- A number of meetings/discussions were held with the province including on December 10, 2018 where DFO provided a point by point explanation for the changes and an overview of the CSAS review process both verbally and in writing. [REDACTED]  
[REDACTED] We clarified that this was advice for Government of Canada decision making and that views of all participants need to be considered in the process.
- In followup, we also on December 13, 2018, explained that Proceedings of CSAS peer-review meetings document all points of consensus and dissent and are published. [REDACTED]  
[REDACTED] It is important to further note that the Research Document has not been submitted or finalized at this time. We have not received any direct communication on this (that we know of) from the authors of the Research document (a contractor paid by DFO and a province of BC scientist).
- As per the process, DFO will share a draft of the Proceedings report for the Steelhead RPA with all participants to ensure we have appropriately captured relevant points of discussion.

s.14(a)

s.21(1)(a)

s.21(1)(b)

**Kaleta, Michelle**

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**From:** Reid, Rebecca  
**Sent:** February-25-19 5:07 PM  
**To:** Lapointe, Sylvie  
**Subject:** FW: TR: Letter from BC on Steelhead Trout  
**Attachments:** {D2019-02-07T11-29-54-768}ZachariasJanuary242019.pdf;  
{D2019-02-07T11-29-54-822}Appendix1ZachariasJanuary242019.pdf;  
{D2019-02-07T11-29-54-872}Appendix2ZachariasJanuary242019.pdf

Here is the letter.

RR

Rebecca Reid  
Regional Director General/ Directrice générale régionale  
Fisheries and Oceans Canada - Pacific Region/ Pêches et Océans Canada - Région du Pacifique  
200-401 Burrard Street / 401, rue Burrard, bureau 200  
Vancouver, BC/CB V6C 3S4  
Office / Téléphone: 604-666-6098  
Cell / Cellulaire: [REDACTED]  
E-mail/ Courriel: [rebecca.reid@dfo-mpo.gc.ca](mailto:rebecca.reid@dfo-mpo.gc.ca)

**From:** Stringer, Kevin <[Kevin.Stringer@dfo-mpo.gc.ca](mailto:Kevin.Stringer@dfo-mpo.gc.ca)>  
**Sent:** Monday, February 11, 2019 8:32 AM  
**To:** Reid, Rebecca <[Rebecca.Reid@dfo-mpo.gc.ca](mailto:Rebecca.Reid@dfo-mpo.gc.ca)>; Thomson, Andrew <[Andrew.Thomson@dfo-mpo.gc.ca](mailto:Andrew.Thomson@dfo-mpo.gc.ca)>  
**Cc:** Robinson, Connor <[Connor.Robinson@dfo-mpo.gc.ca](mailto:Connor.Robinson@dfo-mpo.gc.ca)>  
**Subject:** FW: TR: Letter from BC on Steelhead Trout

Had you seen this?

KS

**From:** Proctor, Jody  
**Sent:** Monday, February 11, 2019 7:53 AM  
**To:** Stringer, Kevin <[Kevin.Stringer@dfo-mpo.gc.ca](mailto:Kevin.Stringer@dfo-mpo.gc.ca)>; Robinson, Connor <[Connor.Robinson@dfo-mpo.gc.ca](mailto:Connor.Robinson@dfo-mpo.gc.ca)>  
**Subject:** Fwd: TR: Letter from BC on Steelhead Trout

Assuming you saw this. We will be responding on behalf of eccc at the request of DM Lucas.

Will share response with you.

Sent from my Bell Samsung device over Canada's largest network.

----- Original message -----

From: "Morel, Philippe" <[Philippe.Morel@dfo-mpo.gc.ca](mailto:Philippe.Morel@dfo-mpo.gc.ca)>

s.16(2)(c)

Date: 2019-02-08 1:00 PM (GMT-05:00)  
To: "Proctor, Jody" <[Jody.Proctor@dfo-mpo.gc.ca](mailto:Jody.Proctor@dfo-mpo.gc.ca)>  
Cc: "Richter, Julie" <[Julie.Richter@dfo-mpo.gc.ca](mailto:Julie.Richter@dfo-mpo.gc.ca)>  
Subject: TR: Letter from BC on Steelhead Trout

See correspondance attached

Would you prefer Stephen Luca respond that Tim will respond or do you prefer we (science) provide some bullet to ECCC to respond directly

Philippe

-----Message d'origine-----

De : Milburn-Hopwood, Sue (EC) <[sue.milburn-hopwood@canada.ca](mailto:sue.milburn-hopwood@canada.ca)>

Envoyé : 7 février 2019 20:13

À : Morel, Philippe <[Philippe.Morel@dfo-mpo.gc.ca](mailto:Philippe.Morel@dfo-mpo.gc.ca)>

Objet : FW: Letter from BC on Steelhead Trout

Have you seen this? Does it make more sense for your Deputy to respond? Sue



**Pages 319 to / à 325  
are duplicates of  
sont des duplicatas des  
pages 301 to / à 307**